2018-2019 COURSE SYLLABUS



Teacher: Marekus Fluellen Room Number: 313 Semester: Spring 2019 Textbook: Glencoe Algebra 1 CCE Phone Number: 404-802-3100
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Tutorial Days: Mon - Weds
Tutorial Hours: 345-430
Tutorial Location: Rm 313

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 Content Unit Summaries:

- Unit 1: Relationships Between Quantities and Expressions
 - Students will interpret the structure of expressions and solve problems related to unit analysis. Students will address properties of rational and irrational numbers and operations with polynomials in preparation for working with quadratic functions later in the course. Content addressed in Unit 1 will provide a solid foundation for all subsequent units.
- Unit 2: Reasoning with Linear Equations and Inequalities
 - Building on standards from middle school, 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 in two variables; (4) create and interpret systems of inequalities where applicable; for example, students will create a system to define the domain of a particular situation, such as a situation limited to the first quadrant; the focus is not on solving systems of inequalities; (5) rearrange formulas to highlight a quantity of interest; (6) recognize arithmetic sequences as linear functions. Some of the Unit 2 standards will be repeated in Units 3, 4, and 5 as they also apply to quadratic and exponential functions.
- Unit 3: Modeling and Analyzing Quadratic Functions
 - 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 AND ax2 + 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: Modeling and Analyzing Exponential Functions
 - 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: Comparing and Contrasting Functions
 - Students will compare and contrast linear, quadratic, and exponential functions in this unit.
- Unit 6: Describing Data
 - 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.

Week 1: **Unit 1: Relationships Between Quantities and Expressions** Week 2: **Unit 1: Relationships Between Quantities and Expressions** Week 3: **Unit 2: Reasoning with Linear Equations and Inequalities** Week 4: **Unit 2: Reasoning with Linear Equations and Inequalities** Week 5: **Unit 2: Reasoning with Linear Equations and Inequalities Unit 3: Modeling and Analyzing Quadratic Functions** Week 6: Week 7: **Unit 3: Modeling and Analyzing Quadratic Functions** Week 8: **Unit 3: Modeling and Analyzing Quadratic Functions** Week 9: **Unit 4: Modeling and Analyzing Exponential Functions** Week 10: **Unit 4: Modeling and Analyzing Exponential Functions** Week 11: **Unit 4: Modeling and Analyzing Exponential Functions** Week 12: **Unit 5: Comparing and Contrasting Functions** Week 13: **Unit 5: Comparing and Contrasting Functions** Week 14: **Unit 6: Describing Data** Week 15: **Unit 6: Describing Data** Week 16: **Review, Test Prep, Remediation, Flex, and Extension** Week 17: **Review, Test Prep, Remediation, Flex, and Extension** Week 18: **Review, Test Prep, Remediation, Flex, and Extension**

<u>Course Outline</u>: (*Time line is adjustable*)

Evaluation and Grading:

Course Components	Weights			
Projects	10%	Care dia a Ca	l-	
Classwork and Participation	40%	Grading So	Grading Scale	
Homework	5%	100-90	Α	
Losson Auizzos	20%	89-80	В	
	2070	79-70	С	
Unit Tests (or Performances)/Projects	25%	69.0	F	
TOTAL	100%	09-0	I '	
		Not Evaluated	NE	

Campus Portal for Parents and Guardians: Visit <u>https://ic.apsk12.org/portal</u> to view class schedules, attendance records and grades. To activate your account, visit the school to receive your login (activation key).

Required Materials:

Pen Pencil Paper 3 Ring Binder w/ dividers 3 x 5 Index Cards Color Pencils or Pens (Green, Red, Blue min.) Calculator (recommended) Ti-83, 84, 32

Classroom Expectations:

Class notes: You will be expected to take detailed notes during each class lesson. These class notes will help you when completing your class work, homework, and when studying for tests. The expectation is that by the end of the fiscal school year each student will have a guide and reference for the End of Course testing and a skill refresher for the next math course. Notebook/Binder Checks will be a part of the Quiz category and will be frequently checked with at least a 1 week notice.

Assignments: Students will receive an assignment daily of various types. Both class and homework assignments will be collected at the end of the week. These assignments will count in your "Daily classwork and or homework" sections of your grade.

Quizzes: Throughout the course, we will have short quizzes over whatever topic we are covering at that time. Expect them to be both cumulative and single subject quizzes. (Multi choice, short answer, writing prompts, and application task.)

Tests: At the end of each unit, students will be administered a cumulative assessment. These assessments will be taken by all students.

Make-up work: When work is missed due to an excused absence, all missed assignments are due within one week of your return. It is your responsibility to find out what you missed and get assignments to me in a timely fashion.

Make-up Test: When a test is missed due to an excused absence, the test must be made up within one week of your return. All make-up work, including tests, is the responsibility of the student. If you are ever unhappy with a teacher-generated test, please see me. Ask for extra practice, remediation and help. Once these things are complete, you may attempt a different version of the test on which you were not successful. Please complete any retakes within a month of non-success! Test will be averaged for 1 combined grade.

Attendance/Tardy Policy: See Student Handbook/School policy

"House Rules"

- Always be on time and prepared to learn.
- Passes will not be issued during first or last 10 minutes of class.
- Hats, hoods, headbands, and/or head garments of any kind are not to be worn in the school building.
- Electronic devices, including phones, iPods, ear buds, etc., are not permitted during the school day. All electronic devices must remain turned off and out of sight or they may be confiscated. Confiscated items will only be returned to legal parent/guardian. (Unless teacher pre-request scholastic usage)
- Please stay in your class and in your seat until the bell rings.
- Thank you for assisting in keeping our high school clean by picking up around your area and throwing your trash away. This is particularly vital in the cafeteria area.
- No food or drink in class whatsoever (Except Water)

Discipline Protocol (*Refer to Student Handbook for Details*)

Minor misconduct (level one offenses – such as excessive non subject talking, insubordination, etc.) will follow below plan:

- 1st Offense: Warning
 - 2nd Offense: Teacher-Student Conference
- 3rd Offense: Detention, Behavior Analysis Assignment, and Parent Conference
- 4th Offense: Discipline Referral

Major offenses will receive an automatic discipline referral.

Course Expectations

Behavior: Each student should:

- 1. Be in your seat, ready to begin when the bell rings.
- 2. Have a pencil, paper, notebook, textbook, and homework out at the beginning of class working on the question of the day.
- 3. Be respectful and cooperative to the teacher and classmates.

4. Follow all school rules stated in the school handbook.

LATE ASSIGNMENTS: It is important that students are responsible and meet established due dates for assignments. Late is defined as anytime work is submitted after the assignment has already been collected by the teacher.

MAKE-UP AND MISSING ASSIGNMENTS: Students with an excused absence will be expected to submit missed work on or before the third class meeting after the absence. Pre-announced assignments are due upon return to school.

School-wide Expectations:

DEFICIENCY REPORTS: Parents and guardians are informed when students are making unsatisfactory progress in classes. Poor performance will be reported to parents and guardians as soon as problems are evident. Deficiency reports with plans for remediation will be written for all students making unsatisfactory progress, and parent-guardians conferences must be scheduled. Unsatisfactory grades should never come as a surprise to parents, guardians, or students. Teachers will:

- Contact parents and guardians early in the semester if academic, attendance, or behavioral difficulties are apparent.
- Notify the counselor, SST/RTI Chair, and the academy leader of serious problems that are affecting classroom performance.

ATHLETIC ELIGIBILITY: Students wanting to participate in athletic programs governed by the GHSA and extracurricular activities must meet eligibility requirements to participate. The Athletic Director (and the Extracurricular Activities sponsors) will collaborate with teachers to monitor and to identify students in danger of failing courses. All faculty members will be given a master list of students participating in extracurricular activities and athletics under the auspices of the GHSA. **Resources:**

• Recommendations

0	www.regentstestprep.com	TBA
0	www.mathwarehouse.com	Optional
0	www.ck12.org	Optional
0	www.desmos.com	Optional
0	GOOGLE Classroom	Daily
0	www.remind.com	Daily
0	Student.hrw.com	TBA