Accelerated Algebra I
2019-2020

Melanie Reiney reiney-m@harris.k12.ga.us

Gina Allen allen-g@harris.k12.ga.us

Rationale – Course Description:

Accelerated GSE(Georgia Standards of Excellence) Algebra I is the first in a sequence of mathematics courses designed to ensure that students are prepared to take higher-level mathematics courses during their high school career, including Advanced Placement Calculus AB, Advanced Placement Calculus BC, and Advanced Placement Statistics.

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, 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.

II. Course Objectives:

The fundamental purpose of Accelerated Algebra I 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 functions by comparing and contrasting linear, quadratic, and exponential phenomena. 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. In this course students will gain a deeper understanding of such concepts as domain and range, intercepts, increasing/decreasing, relative maximum/minimum, symmetry, end behavior, and the effect of function parameters. The statistics unit builds upon students' prior experiences with data, providing students with more formal means of assessing how a model fits data. Students use regression techniques to describe approximately linear relationships between quantities.

III. Format and Procedures:
The Instructor will:
1. present concepts, principles and other information about Accelerated Algebra I and applications.
2. use modeling strategies, lecture, discovery lessons, demonstrations, projects, and manipulatives.
3. provide opportunities for discovery and discussion.
4. provide the tools necessary for lesson investigations and lab activities.
5. demonstrate how to use tools and other manipulatives.
6. stimulate use of technology.
7. use diverse instructional methods to meet the needs of all students.

Students will:
1. takes notes and work example problems.
2. perform lesson investigations.
3. use graphing calculators and computers.
4. participate in class discussion and ask questions when needed.
5. present solutions to problems both written and orally. All work must be shown at all times.
6. complete assignments on time.
7. complete lab assignments.
8. cooperate with peers when working with groups or with a partner.
9. communicate effectively both orally and writing.
10. complete unit tests, quizzes, and nine-week exams.
11. organize a notebook with all material from this course.

IV. Course Requirements:

Students are expected to bring a book, notebook, and pencil to class each day. Students should be ready to begin at the sound of the bell. This includes notebooks out and pencils sharpened. Your personal Agenda is required to use the restroom. Please make sure you bring it to class daily. This year, we are suggesting that students have a **TI-30XS MultiView calculator to use for class work and homework.** We will give step by step instructions in class using this calculator. It would be valuable for your student to have this calculator throughout high school. If you decide to purchase one and are unable to locate them in a store, they can be found on online sources such as Walmart.com or Amazon.com. Many versions of Texas Instrument calculators are available, so please be careful to get the right model number. We will use graphing calculators from time to time in class only. I have a class set of these and

there is no need to purchase a graphing calculator at this time. A graphing calculator can be used on the Georgia Milestone Test, as well as the **TI 30X MultiView**.

This course requires that students take notes each day and complete all assignments on time. Students will be responsible for class lectures, lab activities and other assignments. Students will also have a nine-week comprehensive test at the end of each nine-week period. A notebook will be expected to be kept including the following: **syllabus, notes, graded work and handouts.** Your teacher will advise you as to how the notebook will be setup.

It is the students' responsibility to complete the homework assignments and **show work**. The following homework policy is being implemented in Accelerated Algebra I this year: not turned in on due date, 20% deduction; not turned in second due date, 40% deduction; not turned in third due date, 60% deduction; not turned in fourth due date, 80% deduction. There will not be a 5th due date, instead a zero will be entered as the student's grade. Quizzes will usually be announced, but an occasional pop quiz may be given.

- It is recommended that students spend 10 minutes each night reading over the days' notes even if no homework is assigned. Vocabulary and examples are important and the time spent reading over the notes will help the student become more familiar with the material.
- If a student knows about a test in advance and is absent the day before or the day of the quiz or test, the student must take the quiz or test on the day of return.
- Students who miss a day, need to check with the instructor immediately to makeup work that was missed. Students are responsible for all notes and assignments. All tests, quizzes, labs, and various other assignments may have to be made up before or after school. Please plan accordingly.
- Students will have **three days** to complete and turn in all makeup work.
- Students who are absent due to school related activities should see the instructor before the absence to schedule makeups.
- No electronics or cell phones are to be used during class, they will be taken up if visible. **If used during a test, students will receive a zero.**
- **Students will receive a zero on assignments for cheating.**

V. Grading Procedures:

Tests	30%
Quizzes	30%
Classwork/Homework	30%
Nine-weeks Comprehensive Exam	10%

Georgia Milestone Algebra I Test

The purpose of the Milestone test is to improve student achievement through effective instruction and assessment of the Georgia Performance Standards, and to ensure that Georgia students have access to a rigorous curriculum that meets high performance standards. The State Board of Education has determined that the final grade for this course will include both nine weeks averages as well as the Milestone score. The final grade received for the course will NOT be calculated as an average of the four nine weeks grades, but as a combination of the average of those and the Milestone score. The Milestone score will count 20% and your final average will count 80%.

Student Name: _____ Student Signature: _____

Parent/Guardian Signature: _____