



ALGEBRA 2 WITH STATISTICS

Teacher Name: Emily Albert

Teacher E-mail: esalbert@madisoncity.k12.al.us

Course Description:

In Algebra II with Statistics, students incorporate knowledge and skills from several mathematics content areas, leading to a deeper understanding of fundamental relationships within the discipline and building a solid foundation for further study. In the content area of Algebra and Functions, students explore an expanded range of functions, including polynomial, trigonometric (specifically sine and cosine), logarithmic, reciprocal, radical, and general piecewise functions. Students also solve equations associated with these classes of functions. In the content area of Data Analysis, Statistics, and Probability, students learn how to make inferences about a population from a random sample drawn from the population and how to analyze cause-and-effect by conducting randomized experiments. Students are introduced to the study of matrices in the Number and Quantity content area.

A focus on mathematical modeling and real-world statistical problem-solving is included across the course; see Appendix E for more information on the modeling cycles for mathematics and statistics. It is essential for students to use technology and other mathematical tools such as graphing calculators, online graphing software, and spreadsheets to explore functions, equations, and analyze data.

Course Objectives:

To meet all objectives for Algebra 2 as set forth by the Alabama Course of Study and Madison City Schools.

Classroom Expectations:

You are expected to conduct yourself in a respectful and productive manner. In addition to all the rules and expectations listed in the student handbook, I expect you to have a positive attitude, treat others with respect, practice self-discipline, and demonstrate responsibility. If these conditions are not met, you can expect one-on-one meetings with me, parent/instructor conferencing, and administrative action, if necessary.

Cell Phone Expectations

ALL electronic devices are prohibited to be used during the instructional day. This is from 8:12-3:28. This includes: cell phones, smart watches, earbuds/headphones/airpods, tablets, and personal computers (school issues laptops will be allowed). Discipline will be given to ANY student who uses an electronic device. If you bring your device to school, it MUST be placed in your bookbag. It cannot be on your person.

Tardy Policy

Students late to ANY class, without a pass, will report to a tardy scanning station. You will input your identification number on the pin pad. A tardy slip will be printed for you to report to class. Parent email will be sent for every tardy. Discipline will be as follows: 3 total tardies will result in 1 day of ISS; 6 total tardies will result in 2 days of ISS; Progressive discipline to follow.

Grading Policy:

Grades are based on a 100 point scale. We have two types of grades: daily grades (30% of final grade) and tests (70% of final grade). The percentage based grading scale is as follows: A (90-100), B (80-89), C (70-79), D (65-69), and F (below 65). Grades will be a reflection of mastery of the standards. Make sure all absences are excused as class work can be made up and graded for excused absences only.

Cheating/plagiarizing will be handled by the teacher at teacher discretion.



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Exam Exemption Policy

Any student in grades 9-12 are eligible to earn an exam exemption for the 2025-2026 Exams for each class IF they have earned an 85% or higher as the final grade for that course. Any of the following will EXCLUDE a student from exempting for that class:

- More than five EXCUSED absences
- Any UNEXCUSED absence
- In School Suspension (ISS) for 3 days or more
- Out of School Suspension (OSS)
- One or more days of Alternative School placement
- Not participating in the state standardized assessment for their grade level (10th PreACT, 11th ACT with Writing, 12th WorkKeys, and AP exams)

Attendance and full participation in reviews and assignments for the class leading up to the day of the final exam are required.

Make-up Work Policy:

Students are permitted to make up work, tests, and other assignments when absences are excused. Under normal circumstances, it is expected that students will submit previously assigned work upon return to school after an excused absence. All work missed on the day(s) of excused absence(s) must be made up within three school days after returning to school. However, for extended excused absences, the teacher may grant additional time but not to extend beyond two weeks past the return to school. It is the joint responsibility of student and parent to ensure a student makes up work following excused absences. Teachers may alter assignments, tests, work, activities, etc. as necessary to ensure an accurate evaluation of the student's performance after an excused absence.

Text and Other Required Reading:

Algebra 2 with Statistics by Big Ideas Learning

Materials and Supplies Needed:

- Scientific Calculator (TI-XS recommended)
- Loose Leaf College Ruled Paper
- Notebook/binder
- Pencils or erasable pens
- Graph Paper

Laptops

Concerning laptop utilization: 1. Student laptops should not be hard-wired to the network or have print capabilities. 2. Use of discs, flash drives, jump drives, or other USB devices will not be allowed on Madison City computers. 3. Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops. 4. Laptops and other electronic devices will be used at the individual discretion of the teacher.



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18 – WEEK PLAN*	
Week 1	Chapter 1 - Linear Functions
Weeks 2-4	Chapter 3 - Quadratic Equations and Complex Numbers
Week 5	Chapter 2 - Quadratic Functions
Weeks 6-7	Chapter 4 - Polynomial Functions
Weeks 8-9	Chapter 5 - Rational Exponents and Radical Functions
Weeks 10-11	Chapter 6 - Exponential and Logarithmic Functions
Weeks 12-13	Chapter 7 - Rational Functions
Week 14	Chapter 8 - Periodic Functions and Trigonometry
Weeks 15-16	Chapter 10 - Matrices
Weeks 17-18	Chapter 9 - Data Analysis and Statistics

***This is a tentative plan and may change at the discretion of the teacher.**

I look forward to having a great year! I feel fortunate to have your student in my class this semester and hope that you will contact me should you have any concerns about his or her progress or any aspect of the instruction. With your student, please read the attached policies, then **please complete the contact form in Schoology to acknowledge that you have received, read, and understood the syllabus. Thank you!** Please provide a current email address and phone number at which I can contact you should the need arise. Please contact me at school via my email with any concerns.

Game On!