

Enhanced Advanced Algebra & AP Precalculus: Concepts and Connections

27.09310

Mr. Zimmerman

A.R. Johnson Magnet High School

2024-2025

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Grade: 10-12

Classroom: 803

Enh. Adv. Algebra & AP Precal

Welcome

Welcome to *Enhanced Advanced Algebra and AP Precalculus*. My name is Mr. Jacob Zimmerman. I have a Bachelor of Science in Chemical Engineering, with experience in the biomanufacturing field. I have experience in mathematics up to Differential Equations, which is used for engineering concepts and practices. I plan to use Georgia Department of Education (GaDOE) learning plans to guide instruction through the course. My goal is to foster an atmosphere of mutual respect both between student and teacher and between students. I always encourage questions, especially during class but also via electronic communication. I look forward to having a great school year!

Course Overview

Enhanced Advanced Algebra & AP Precalculus is a thoughtful blend of Advanced Algebra: Concepts & Connections and Precalculus. Students will be provided the opportunity to develop a deep understanding of concepts in Algebra that are critical to the study of Calculus as well as an understanding of trigonometry and its applications. This course enhances students' geometric, algebraic, graphical, and probabilistic reasoning skills. Students will apply their algebraic and geometric reasoning skills to make sense of problems involving geometry, trigonometry, algebra, probability, and statistics. Students will continue to enhance their analytical geometry and reasoning skills when analyzing and applying a deep understanding of polynomial expressions, proofs, constructions, rigid motions and transformations, similarity, congruence, circles, right triangle trigonometry, geometric measurement, and conditional probability.

Units to Be Taught

August 2024 – December 2024

- Unit 1: Investigating Descriptive and Inferential Statistics *AP Unit 1*
- Unit 2: Modeling Radical, Exponential, and Logarithmic Functions *AP Unit 2*
- Unit 3: Modeling Polynomial Functions and Exploring Linear Algebra and Matrices *AP Unit 1*
- Unit 4: Modeling with Rational and Piecewise-Defined Functions *AP Unit 1*

January 2025 – May 2025

- Unit 5: Exploring Trigonometry and the Unit Circle *AP Unit 3*
- Unit 6: Modeling with Conic Sections and Polar Equations *AP Unit 3*
- Unit 7: Modeling with Vector Quantities *AP Unit 4*
- Unit 8: Modeling with Sequences and Series *AP Unit 4*
- Unit 9: Culminating Capstone Unit

LaunchPad, Canvas, and Textbook

- Launchpad is our single sign on platform. All the apps/webtools that students will access throughout the school year, in all their courses, can be found here. You may also download the Classlink app to your device to access Launchpad from your phone or tablet.

- Our learning management system, Canvas, can be found in each student's Launchpad. The courses they are registered for will be displayed on the Dashboard in Canvas. Click on each course to find announcements, assignments, and all online instruction. You may also download the Canvas app for parents and the Canvas app for students to your cell phone or tablet.
- Textbook: *Into Math - Algebra II*, Houghton Mifflin Harcourt.

Required Materials

- RCSS District Issued Laptop
- TI84 Graphing Calculator (School will provide one, but I do suggest you get one for future classes)
- Pencils
- Erasers
- Graph Paper
- 3-ring Binder

Grading Policy

Middle and High school student performance will be recorded and reported in all courses by numerical grades, based on a 100-point scale.

- Calculation of Final Grades Final grades will be determined by the cumulative semester average using the following criteria:
 - Minor Grades = 60% Examples include quizzes, labs, and other graded assignments to assess certain standards in a unit of study. Minimum number of minor grades per 6-week progress report period = 5
 - Major Grades = 40% Examples include unit tests, essays, research papers, project-based assignments, and other culminating assessments to measure mastery of standards that comprise a unit of study. Minimum number of major grades per 6-week progress report period = 2

Late/Missing Assignments

Late work is defined as assignments that are submitted after the specified deadline. This does not apply to work submitted late due to absence from school. Students are expected to submit assignments on time.

Multiple incidents of late work may result in teacher-student-parent conferences to examine and correct the student's work habits through an academic contract.

Scores may be reduced by 5% per school day for a 25% maximum reduction (five school days).

Late work submitted after the fifth school day will not be accepted and will result in a zero for the assignment.

Relearn/Reassess

Students who perform below 70% on a major assignment will be given the opportunity to relearn and reassess to show improvement in their mastery of the standard.

Students will submit a Relearning Plan as part of this process. This plan should include:

- Analysis of their errors or misconceptions on the previous major assignment.
- Complete assignments provided to relearn the content for mastery. Students may also attend a tutoring session.
- Complete and turn in any missing assignments.
- Commit to date(s) and time(s) to redo the assignment or retake the assessment.
- Share the plan with their parent and teacher for approval and signatures.

Upon satisfactory completion of the plan, as determined by the teacher, student should be given a minimum of one opportunity to be reassessed.

Teachers should have discretion to determine if R&R opportunities will be given for any minor assessment.

Tutoring

Tutoring is available as needed by appointment only. Please contact teacher if you are interested.

Classroom Expectations

- Arrive on time and settle yourself before class begins.
- Listen and following instructions and directions.
- Come to class ready to learn and prepared with the necessary materials.
 - Laptop is charged. Paper and pencils are accessible. Textbook is accessible.
- Be respectful to both yourself and others.
- Show patience for mistakes, made by yourself, your peers, or your teacher.
- Follow all school policies as outlined in the Student Handbook and Code of Conduct.

Disciplinary Actions

For level 1 offenses (which do not immediately involve administration or concerns for student safety):

- 1st offense – redirection and verbally warning
- 2nd offense – documented, redirection, parent contacted
- 3rd offense – documented, detention, parent contacted
- 4th offense – referral to the administration

All higher level offenses will immediately be referred to administration.

Cell Phone Policy

As per the Richmond County School System Cell Phones and Electronic Communication Devices Policy, all items considered personal electronic communication devices are prohibited from use during the instructional day, with the terms defined within the policy. Cell phones must be silenced, turned off, and put away out of view. Contact between student and parents may be made through the main office. Violations of this policy may result in disciplinary action including, but not limited to, confiscation of the device with the infraction documented in the student's discipline record.

Disclaimer

The teacher reserves the right to edit this document at any time and will promptly notify students and parents if there are any changes related to disciplinary action or general course expectations.