

Advanced Mathematical Decision Making

27.08500

Mr. Zimmerman

Classroom: 809

A.R. Johnson Magnet High School

2025-2026

Email: zimmerja@boe.richmond.k12.ga.us

Remind: a7md20m

AMDM

Welcome

Welcome to *Advanced Mathematical Decision Making*. My name is Mr. Jacob Zimmerman. I have a Bachelor's Degree of Science in Chemical Engineering, with experience in the biomanufacturing field. I am experienced in mathematics up to *Differential Equations*, which is used for engineering concepts and applications. My curriculum is primarily based on the units laid out by the Georgia Department of Education, with supplementary materials provided. I strive to keep clear, updated course information both in-class and online through our course's Canvas page. I encourage questions, preferably during class, but I also accept them via electronic communication. I look forward to working with you and making this school year great.

Course Overview

Advanced Mathematical Decision Making (AMDM) (27.08500) is a fourth-year mathematics course option designed to follow the completion of Advanced Algebra: Concepts and Connections. Students will enhance their understanding of concepts explored in the context of real-life phenomena. The intent of this course is for students to combine their understanding of multiple mathematical concepts as they explore and solve real-world mathematical problems. Students will investigate applications of mathematics in a variety of contexts, including business and financial decision-making, earning, investing, spending, and borrowing money, using functions to model problem situations in both discrete and continuous relationships, and using ratios, rates, and percentages to solve problems. Instruction and assessment should include the appropriate use of manipulatives and technology. Topics should be represented in multiple ways, such as concrete/pictorial, verbal/written, numeric/data-based, graphical, and symbolic. Concepts should be introduced and applied, where appropriate, in the context of realistic phenomena.

Units to Be Taught

August 2025 – December 2025

- Unit 1 – Using the Power of Mathematical Reasoning to Make Decisions
- Unit 2 – Using Probability to Make Decisions
- Unit 3 – Using Statistical Studies to Make Decisions

January 2026 – May 2026

- Unit 4 – Using Mathematical Models to Make Decisions
- Unit 5 – Using Vectors and Matrices to Make Decisions
- Unit 6 – Using Network Models to Make Decisions

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: Michael & Sullivan. Precalculus: Enhanced with graphing utilities. 8th edition.

Required Materials

- RCSS District Issued Laptop
- Pencils/Pens
- Notebook
- 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:
 - o **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
 - o **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 only be accepted at the teacher's discretion.

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.

R&R opportunities will be given for minor assessments at the teacher's discretion.

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.
- Come to class ready to learn and prepared with the necessary materials.

- Laptop is charged. Paper and pencils are accessible. Textbook is accessible.
- Listen and follow instructions and directions.
- 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 verbal 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.