

ADVANCED MATHEMATICAL DECISION MAKING 2025-2026

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Course Description – An option for the fourth mathematical course, it is accepted for admittance in Georgia Universities, but does not meet the requirements for STEM majors. Topics covered in this course include data analysis, rates, ratios, probability, sampling and statistics. It involves the use of algebra, geometry, trigonometry, and discrete mathematics to model a range of situations and solve problems in diverse areas such as statistics and financial mathematics with the emphasis being placed on practical applications and the use of technology.

Topics/Course outline

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

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

Unit 7 – Capstone Project Decision Making in Personal Finance

Supplies – 3 ring binder, Scientific Calculator, pencils, pens, loose leaf paper

Grading – Test/Projects – 63%

Quizzes/Daily Grades – 27%

Final Exam 10%

Academic Expectations

- Show your work in order to get full credit!!
- Be neat. Do not copy from a friend. Copying from a friend is cheating, not learning.
- All tests completed in PENCIL!

Make-up work policy – See student handbook.

Exam Exemption – See student handbook.

Tutoring – Days to be determined by teacher or by appointment.

Contact – Email is the most efficient way to contact your teacher, use the addresses at the top of the syllabus. The school phone number is 912-459-5151 if you need to speak to your teacher. Please leave a message with someone in the office and we will return your call as soon as possible.

Discipline – All students are expected to follow the rules set forth in the student handbook. In the event of disciplinary infractions, the following steps will be taken to correct the behaviors:

1. Warning, student/teacher conference
2. Phone call to parent
3. Teacher detention (and phone call or email to parent)
4. Parent conference
5. Referral to counselor

Please read the course syllabus and let us know if you have any questions.