

Math 1131 Finite Mathematics

Professor: Stephen Griffeth. Please call me Stephen (pronounced “Steven”). My email address is griffeth@math.umn.edu. This is the best way to contact me.

Text: *Finite Mathematics*, 5th edition, by Daniel P. Maki and Maynard Thompson.

Office Hours: 1:30-2:30 Mondays and Wednesdays in Vincent 507. Appointments may be made upon request.

Course description: The focus of this course is on probability and applications of linear algebra. This course contains topics that are useful to students in the Natural and Social Sciences and in Business including probability models, conditional probability, Markov chains, central limit theorem, matrices, linear programming, game theory, and mathematics of mortgage and interest payments.

There will be weekly homework assignments preparing you for the quizzes and exams. There is a quiz each Wednesday, with problems drawn directly from the homework assignments: do the homework, and you will never be surprised by the quiz problems. The exam problems will be substantially similar to the homework problems. Each midterm covers material from roughly a third of the course, and the final is cumulative.

Grading:

- Final 35 %
- Midterm I (Wednesday, February 21) 20 %
- Midterm II (Wednesday, April 4) 20 %
- Quizzes 25 %

Calculators: Calculators will be allowed on nearly all the quizzes, on Midterm I, and on the final exam, but not on Midterm II. You may use any calculator you are strong enough to carry. Slide rules are not allowed.

Expectations: You should spend roughly ten hours per week outside of class working on the homework, reading the book, and preparing for the quizzes and exams. There will be no makeups given for missed quizzes. The

lowest two quiz grades are dropped. Makeups for exams will be given only in extreme circumstances.

Rough Course Outline (this is subject to change, except for the exam dates):

Wednesday January 17th-Monday February 19th: Introduction to probability.

Wednesday February 21st: Midterm I.

Monday February 26th-Monday April 2nd: Introduction to matrices and systems of linear equations.

Wednesday April 4th: Midterm II

Monday April 9th-Wednesday May 2nd: Applications of linear algebra and matrices. Markov chains and zero sum games.

Policy on incompletes: Incompletes will not be granted except in very rare situations.