

MAT 183 — Elements of Modern Mathematics

Syllabus and Information Packet

Fall 2005

This course is designed for students in the School of Management. The course has three main components: Probability Theory, the Mathematics of Finance, and topics from Linear Algebra.

Text: Goldstein, Schneider, and Siegel (2004). *Finite Mathematics and its Applications* (8ed.). Prentice Hall.

Course Supervisor: Professor Graham Leuschke, 206C Carnegie Hall. Phone: 443-1469. Email: gjleusch@syr.edu.

Special Note: The Final Examination will be given on Wednesday, 14 December, between 8:00 am and 2:30 pm. **This is the only time the final will be given. There will be no makeups. Do not plan to leave campus before this time.**

Calculator: One important feature of this course is that each student must have and learn to use the TI-83Plus programmable graphics calculator. Since the course involves a great deal of computation, using the calculator will save a substantial amount of time and effort. Some of the time that is saved must be spent learning how to use the calculator. This is primarily your responsibility. The sooner you become proficient with the calculator, the more time you will save and the more efficiently you will be able to use the calculator on your homework, quizzes, tests, and the final exam.

Class Preparation, Homework, and Recitations: You are expected to have read the appropriate section of the text before the class in which that material is discussed. You should also try to work the examples in the text. After the class presentation, you should re-read the material and work the assigned problems.

General Comments:

1. The calculator will be required on all tests, quizzes, and the final exam. You are responsible for knowing how to use it and for having all of the relevant programs.
2. Notes can be stored on the calculator as programs. Such notes may be used on the tests and final exam. Note that the amount of memory available for such notes is limited.

Grading Policies: Your final grade will be based on three tests, the final exam, and a recitation grade (which will be based on quiz scores and attendance). These factors will be weighted as follows:

Recitation	15%
Test I (Probability)	20%
Test II (Finance)	20%
Test III (Linear Algebra)	20%
Final Exam	25%

Quizzes will typically be given every week in recitation. Homework may be graded. The final exam is comprehensive, and will have three parts corresponding to the units of the course. **No makeup tests will be given.** For students with an excused absence from a test, the portion of the final exam corresponding to the missed test will be used for the missing score. Attendance at every lecture and recitation is required and vital to your success in this course. You are responsible for any announcements made in lecture or recitation. Final letter grades will be assigned according to the following scheme:

A	93 – 100%	C+	77 – 80%
A-	90 – 93%	C	73 – 77%
B+	87 – 90%	C-	70 – 73%
B	83 – 87%	D	65 – 70%
B-	80 – 83%	F	0 – 65%

Help: The Mathematics Department runs a Math Clinic in the large reading room on the second floor of Carnegie Hall. The hours will be posted shortly after the beginning of the semester. You can also attend your instructors' office hours, which they will announce during the first week of class.

Special Needs: Students who may need special considerations because of any sort of disability should contact their instructor as soon as possible.

The only way to *learn* mathematics is to *do* mathematics! With this in mind:

- At the end of each section in the textbook is a short set of practice problems. After reading the section, you should work these problems and check your answer against the detailed solution provided.
- You should work out and carefully write up all the assigned exercises. A portion of each week's class and recitation time will be devoted to discussing these problems. Time restrictions mean that only a few problems can be discussed in detail, so the instructor will usually just describe the basic steps in the solution.