

MA 162 Applied Finite Mathematics - Fall 2004

Instructors:

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Class times: Lectures MW 9-9:50 BS 116.

Recitations:

Sec 1 T 2:00-3:15 CB237 Sec 2 R 2:00-3:15 CB237

Sec 3 T 3:30-4:45 CB234 Sec 4 R 3:30-4:45 CB241

**Office hours: T 12:00-1:00(POT 802) R 11:00-12:00(Mathskeller) R
12:00-1:00(POT 802)**

TA: Brendan Chandler Office: 702POT
Phone: 257-6804 E-mail: bren@ms.uky.edu

Recitations:

Sec 5 T 2:00-3:15 CB237 Sec 6 R 2:00-3:15 CB237

Office hours: MF 11:00-12:00(POT 702) W 11:00-12:00(Mathskeller)

Textbook: S.T. Tan, Applied Finite Mathematics, Fifth Edition

Goals: This course will cover five topics that have very wide applicability: linear equations and models, linear optimization, basic theory of interest, counting principles, and probability. Your goal for the course should be to learn each of these topics well enough so that you can confidently apply them to solve problems that are similar, but not identical to the ones we cover in class. **You will be expected to learn the material well enough so that you are able to apply the methods in a setting that we have not covered in class.**

It is essentially impossible to teach mathematics, it must be learned. To understand what I mean by this, consider the impossibility of learning to play tennis by listening to someone describe how to play tennis. You will not learn the material in this course by just listening to the lectures, and thinking to yourself - "Yes, I understand that". You must work the problems and make mistakes before you will begin to learn. I view my job as that of an assistant to help you learn as much of the material as you desire.

Outline of Content: The basic content to be covered is outlined below. A detailed outline

with dates and text sections can be found in the "Assignment" file.

Linear Equation and Models, Chapters 1 and 2
Linear Optimization and Applications, Chapters 3, 4
Mathematics of Finance, Chapter 5
Basic Counting Principles, Chapter 6
Probability, Chapter 7

Prerequisites: You should have a strong understanding of college algebra.

Homework (WHS): You should enroll in our web based homework system and systematically work out and submit the problems on line. It is recommended that you print and work out the answers by hand and then submit. You can have multiple attempts and a generous credit if you do a majority of problems. Most WHS assignments will be due by midnight Monday and each homework assignment will be worth a maximum of 10 points.

These are awarded as follows:

30% -40% = 1 point, 40%-60%=3 points, 60%-75%=5 points, 75%-85%=7 points and 85% or more equals 10 points.

Total homework grade will contribute 10% of your final grade.

Quizzes and recitation: Your recitation instructor will assign 10% of your final grade based on your quiz grade and participation in the recitations. There will be about 10 quizzes and they will make up the recitation grade if the student does not miss any recitations. Every unexcused absence will reduce the 10 percentage points of recitation grade by one percentage point. The maximum deduction for absences will be 5 percentage points. Excused absences will be granted as stipulated by the University policy.

Exams: There will be three one hour exams (20% each) and one final (20%). The timings for these exams is already fixed and you should make sure that you don't have any conflicts with them. In case you have a valid excuse, you must contact your Professor in writing at least two weeks in advance to make alternate arrangements for a makeup. For emergency excuses, standard university policy will be enforced.

Please note that all exams are uniformly administered and graded.

Note the times below.

Grading: The grading scale is

A 90-100

B 80-89

C 70-79

D 60-69

E below 60.

You should be able to compute your letter grade at any point during the course of the semester by using your current grades and the above scale.

Tutoring: Tutoring help is available in the Mathskeller (Basement of Classroom Building - corner closest to Euclid and Rose).

Check the web site <http://www.mathskeller.com>

Course plan: In addition to the 11 homeworks listed below, there will be exam reviews which will include the sections marked in red. The lowest homework grade in each exam period will be dropped. The actual number and due dates is subject to minor change during the semester.

Homework Due date/ sections	Date	Section	Date
			8/25
	8/30	1.3 and 1.4	9/1
9/7 1.1,1.2			9/8
9/13 1.3,1.4	9/13	2.3	9/15
9/20 2.1,2.2,2.3	9/20	2.5	9/22
9/26 2.4,2.5,2.6			Exam 1 on September Time and place TBA
	9/27	Exam 1	9/29
	10/4	3.2	10/6
10/11 3.1,3.2	10/11	4.1	10/13
10/17 3.3,4.1,4.2			Exam 2 on October 18 Time and place TBA
	10/18	Exam 2	10/20
	10/25	5.2	10/27
11/1 5.1,5.2	11/1	6.1	11/3
11/7 5.3,6.1,6.2			Exam 3 on November 8 Time and place TBA
	11/8	Exam 3	11/10
	11/15	6.4	11/17
11/22 6.3,6.4	11/22	7.2	11/24
11/29 7.1,7.2	11/29	7.4	12/1
12/7 7.3,7.4,7.5			Final exam on from 8 to 1