

MA 162 Applied Finite Mathematics - Spring 2003

Instructor:

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Office Hours: MWF 11:00-12:00 or by appointment

How to contact Dr. Molzon:

- Drop in during office hours - no appointment is needed. Office hours are listed above.
- Call to make an appointment or ask a question.
- Send email to molzon@ms.uky.edu.

Class times: MW 3:00-3:50 lectures, TR recitations

Textbook: S.T. Tan, Applied Finite Mathematics, Fifth Edition and Excel for Dummies (optional)

Goals: This course will cover four topics that have very wide applicability: linear equations and models, linear optimization, basic counting principles, and basic 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. In addition, you should become familiar enough with Excel so that you can solve fairly involved optimization problems. **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 ride a horse by listening to someone describe how to ride a horse. You will not learn the material in this course by 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 to Finance, Chapters 3, 4, and 5

Basic Counting Principles, Chapter 6

Probability, Chapter 7

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

Problem Sets: Problem sets can be found in the "Assignments" file. You are responsible for doing all of the assigned problems, and you cannot expect to do well in the course unless you develop a clear and solid knowledge of the material through working problems. **In this course it will not be sufficient to memorize an algorithm for doing specific types of problems. You will be expected to understand the material well enough so you are able to do problems unlike the ones we work in class.**

Exams: There will be three one hour exams (20% each) and one final (25%). There will also be weekly quizzes based on the homework problems. The quiz problems will be very similar to the homework problems, and the quiz grade will be worth 15% of your final grade. The exams will contain problems unlike the ones we have done in class. As mentioned above, you are expected to learn the material well enough so that you can apply it in new situations.

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.

Assignments

Sample Exams

First Exam	Sample 1	Sample 2	
Second Exam	Sample 1	Sample 2	
Third Exam	Sample 3	Sample 3	
Final Exam	Sample 1	Sample 2	Sample 3

Tutoring Schedule

Excel Help: I've added links to some web sites offering Excel help and tutorials.

Solver Tutorial

[Teaching Linear Programming Using Microsoft Excel Solver](#)

[Solver Tutorial from Frontline Systems](#)

This tutorial contains step by step instructions for creating a spreadsheet that solve a linear programming problem.

[Linear Equations 1](#)

[Linear Equations 2](#)

[Sample1](#)

[Sample2](#)

[Simple Interest](#)

Grade Distribution from Spring 02: The grade distribution for those students who took the final exam during the Spring 2002 semester is provided below. Approximately 120 students began the course.

A: 9

B: 19

C: 35

D: 17

E: 14