

MA 162 Applied Finite Mathematics - Course Syllabus for Spring 2010

Textbook: S.T. Tan, Applied Finite Mathematics, Seventh Edition Custom Edition: ISBN 0-495-02556-9

Course 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.**

Mathematics must be learned by yourself!

To understand what we 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. Your instructor is only a motivator assistant to help you learn as much of the material as you can.

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 course web

page http://www.msc.uky.edu/sohum/ma162/Ma162_sp10_index.html Linear Equation and Models, Chapters 1 and 2

Linear Optimization and Applications, Chapters 3 and 4

Mathematics of Finance, Chapter 5

Basic Counting Principles, Chapter 6

Probability, Chapter 7

Be sure to also read the appropriate parts of Supplementary Notes at the end of the book as instructed.

Prerequisites: You should have a strong understanding of college algebra. You may get a review as well as some new hints on topics from college algebra, but you have the primary responsibility to recall and use the material. You are also responsible to learn to use your own calculator and to interact with the online homework system (WHS).

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 to solve the problems and are expected to finish your work before the deadline.

WHS Excuse policy: Be aware that the homework is due as soon as the material is covered in class and if you choose to wait till the last days before the deadline, you are risking the loss of credit if some unforeseen circumstances come up. The deadline for a homework cannot be extended for personal reasons. Even valid personal excuses like sickness or travel on official duty are not sufficient **unless they cover the whole period** from the date when the material is discussed in class until the deadline. All requests for excuses must be submitted to the TA as well as the instructor as soon as possible.

The homework grade for the whole course will be calculated based on the percentage of problems successfully completed before the due date. Total homework grade will contribute 50 points towards your final course grade.

Attendance/Quizzes (class): Attendance in class will contribute a total of 30 points towards your final course grade.

The attendance may be in the form of a simple class roll or may be combined with a brief quiz. The details will be announced by your instructor. The attendance grade will be calculated from the record with allowance for a small number of absences. Any valid excuse to miss a class must be communicated to your TA as well as the instructor in a timely fashion with sufficient proof.

Recitation: Your recitation instructor (TA) will assign 50 points towards your final course grade based on recitation attendance and participation. The grading policy will be announced by the recitation instructor (TA) or the course instructor in case of the evening classes.

Exams: There will be three one hour exams (100 points each) and one final (100 points). The timings for these exams are 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 (by email) at least two weeks in advance to make alternate arrangements for a makeup. For emergency excuses, the standard university policy will be enforced. Please note that all exams are uniformly administered and graded.

Exam schedule and Homework and class timetable is available on the course web page.

Grading: The grading scale is based on the percentages calculated from a total of 530 possible points.

A 90-100 B 80-89 C 70-79 D 60-69 E below 60.

You should be able to estimate your current 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> as well as the Study.

General Information. The students are expected to have the rights and responsibility as implied by University regulations. Given below are only some of the details.

Course Policy on Academic Accommodations due to disability: If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address jkarnes@eamil.uky.edu) for coordination of campus disability services available to students with disabilities.

Course Policy on Academic integrity

Students may work together on homework, but should not submit solutions to WHS until they understand how to obtain the answer. All other course work on quizzes and exams must be the student's own work. Cheating may lead to those penalties outlined in the University Senate Rules (6.3.1 & 6.3.2) at the following

website:http://www.uky.edu/USC/New/rules_regulations/index.htm. The Ombud site also has information on plagiarism found at <http://www.uky.edu/Ombud>.)