

## Ma 162 General course outline Spring 2009.

*Refer to the instructor handouts for details concerning your own instructors' policy.*

*Visit the course web page ([www.msc.uky.edu/sohum/ma162](http://www.msc.uky.edu/sohum/ma162)) for current information, by [clicking here](#).*

**Textbook:** S.T. Tan, Applied Finite Mathematics, Seventh Edition ISBN 0-4950-2556-9

**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 is meant 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 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. The teachers are simply assistants 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 web pages.

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

**Important:** Please be aware that we use a special edition which has *Supplementary Notes* starting after page 638.

These notes explain special notations and techniques required for efficient solutions of homework problems. They also provide additional explanations of some of the topics which are only briefly covered in the book.

The students are expected to read these pages along with the main chapters and ask for clarifications if needed. The material in these notes will be assumed to be known.

**Prerequisites:** You should have a strong understanding of college algebra including basic geometry.

**Homework (WHS):** To learn about [how to use WHS, click here!](#) The link is available from the course web page.

You should log into 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.

*A WHS problem is graded as correct if you manage to submit a correct answer at least once to it before the due date.*

*Do not ask for late credit, none can be given!*

Total homework grade will contribute 10% of your final grade. Based on the number of problems correctly finished before the due date, you will get a combined homework grade.

**Quizzes and recitation:** Your recitation instructor will assign 10% of your final grade based on your quiz grade and participation in the recitations. The policy for the points will be announced by your Recitation Instructor.

**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.

**Grading:** Thus the exams will be 100 points each, the homework grade will be averaged to a total out of 50 points and the recitation grade will be a maximum of 50 points. The maximum points to be earned are thus 500. The grading scale is:

A 90-100 (Points 450-500)

B 80-89 (Points 400-449)

C 70-79 (Points 350-399)

D 60-69 (Points 300-349)

E below 60 (Points less than 300).

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>