

MA 162 Applied Finite Mathematics - Fall 2009

Instructor:

Name: Avinash Sathaye Office: POT 703
Phone: 257-8832 E-mail: sathaye@uky.edu
Office Hours: MWF 10- 10:50 (Mathskeller) or by appointment.
Class times: Lectures MW 9-9:50 in CB 118.

TA: Jack Schmidt Office: 963POT
Phone: 257-1429 E-mail: "Jack Schmidt
"<jack@ms.uky.edu>

Recitations:

Sec 1 T 2:00-2:50 CB303 Sec 2 R 2:00-2:50 CB303
Sec 3 T 3:30-4:20 CB207 Sec 4 R 3:30-4:20 CB207
Office hours: Tuesday 10:00-10:50 in Mathskeller and by appointment.

TA: Ann Li Office: 348B (Business Building)
Phone: E-mail: "Ann Li" <ballonann@uky.edu>

Recitations:

Sec 5 T 8:00-8:50 CP183 Sec 6 R 8:00-8:50 CP183
Office hours: Monday & Wednesday 1:00-2:00 PM 348B (Business Building)

Textbook: S.T. Tan, Applied Finite Mathematics, Seventh Edition Custom Edition: ISBN 0-495-02556-9 **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. Mathematics 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 a motivator 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 course web page http://www.msc.uky.edu/sohum/ma162/Ma162_f09_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 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.

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. 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.

Quizzes(class): You will be given an attendance/quiz sheet in each lecture (unless otherwise declared). Each correctly solved quiz will earn 5 points and incorrectly solved but properly signed quiz will earn 2 points. These quizzes will test if you have been paying attention in class and would be designed to be finished in 5 minutes. They will contribute a total of 30 points towards your final course grade. The total will be adjusted to allow for excused absences and may be slightly curved.

Recitation: Your recitation instructor 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.

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 following 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 compute 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.

Introduction to 2009 Fall WHS system (For students in course Ma162)

GETTING IN

- The students need to connect to the web page <https://www.mathclass.org>
- This is how the students should login to the MathClass website (also called WHS below) to retrieve and submit homework assignments, check on grades and contact instructors.
- **Software Requirements:** Use an internet browser, such as Internet Explorer 8.0 (or later version) or Firefox 3.1 (or later version).
Safari will not work correctly.

1. Connect to <http://www.mathclass.org>
 2. Click on the link labeled **Login to WHS**.
 3. Login using your campus active directory account with the user name typed as **ad\UserName** and the usual password for the "**UserName**" account.
 4. If WHS decides that you need to set up a new Math Class account, then you will get a form entitled **Register for an Account**. Fill in the fields and submit the form.
 5. These are the details of the form:
 6. **Email:** Provide an e-mail where you will receive all further communication from WHS. Remember it well! In the future, you should log into WHS using this email as your user name.
 7. **Password:** Set the password to be used for your WHS account. It must be at least 7 characters long and include a character which is neither a letter nor a digit.
 8. **Security Question** and **Security Answer:** If you forget your password, you can have it reset by using the **Forgot your password** link on the login page and giving the Security Answer in response to the Security Question. *The Security Answer is case sensitive.*
 9. **First** and **Last Name:** These should be the same as what you use for University records as your instructor will need to match these with the name on the class roll and grading sheets.
 10. **Affiliation:** Select **College or University** and another pull-down will appear. From it, select **University of Kentucky**. A text field labeled **UK or AS Account** will appear. Put in your active directory login name in the form **ad\UserName** (just like you did to login).
 11. Finally, To **create the account**, click on the ***Create User*** button, then click on the ***Continue*** button.
 12. Your WHS account should work normally, **unless** you have added the class within last few hours. In that case, you may have a delay of up to 24 hours for your new account to be active.
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- **For any further assistance, go to Mathskeller** (063 CB, basement of the Classroom Building).

- **Using other computers:** A special setup is needed only if you use Internet Explorer for a mathematics class. Even this may be unnecessary for any Windows pc in any SCS Lab or the Mathskeller.
 1. To install plugins for Internet Explorer, make sure you are logged in to an account with administrative rights. For example, on a home computer, the first account created on the computer would have administrative rights.
 2. Start up Internet Explorer, go to <http://www.dessci.com/>, click on the MathPlayer icon, and download and install the MathPlayer plugin.
 3. Go to <http://www.adobe.com/svg> click on the link labeled Viewer Downloaded, select the version for Win98-XP (even if you are running Vista), download and install it.
 4. The first time you try to display a homework assignment, you will need to give permission to:
 - Display** pop-ups from the site
 - Run** the MathPlayer plugin on the site.
 - Run** the Adobe SVGViewer plugin on the site.
 - Accept** the Adobe license agreement
 5. You may need also to put <https://www.mathclass.org/> into the Trusted sites list, depending on how your Internet Explorer security is configured. (In addition, you must not disable JavaScript and must allow in-memory cookies.)
 6. If you have problems making this procedure work, temporarily work from any SCS lab or the Mathskeller.

WORKING IN WHS

- **You will find yourself registered in two different accounts, a regular WHS account and a REC account.**

The second account is meant only for a record of your recitation scores and messages from your TA. Do not attempt to do homework in the REC account. Normally, you will not find a homework there, but I have seen some students attempt to register themselves. No credit is derived from such homework!
- In general, working on WHS problems in group is not only tolerated, but encouraged. Many of you will have common questions and the learning experience of discussion with your peers is good for you.
- The course web page is http://www.msc.uky.edu/sohum/ma162/Ma162_f09_index.html There is an easy link to this from your WHS homework page and from time to time, additional information will be posted there. You may also find regular lecture notes and help on using computer programs like Maple and Excel. The use of these programs is not mandatory, but they will greatly enhance your ability and confidence. They may be freely used for doing homework, but are not available for tests and quizzes.