MA 162: Finite Mathematics and its Applications, Sections 001-008
College of Arts & Sciences (A&S)
Department of Mathematics (MA)
Fall 2014

Please read this syllabus carefully. It contains essential information about the course organization, grading, tests, etc. If you need any additional explanation, please don't hesitate to ask your instructor.

Instructor Information:

Instructor: Ray Kremer

Office: Patterson Office Tower 805

Phone: 257-4874

Email: ray.kremer@uky.edu (preferred contact method)

Office Hours:

Monday, Wednesday, 9:00 am - 10:30 am, POT 805

Thursday, 12:00 pm - 1:00 pm, Mathskeller, CB 063

Other times available by appointment

Class Time and Location: MW, 8:00 am - 8:50 am, CB 106

Recitation Time and Location:

Section	Recitation Leader	Day	Time	Location
001	Tefjol Pllaha	Thursday	8:00 am - 8:50 am	CB 337
002	Fouche Smith	Thursday	8:00 am - 8:50 am	CB 335
003	Tefjol Pllaha	Thursday	11:00 am - 11:50 am	CB 337
004	Fouche Smith	Thursday	11:00 am - 11:50 am	CB 335
005	Tefjol Pllaha	Thursday	2:00 pm - 2:50 pm	CB 337
006	Fouche Smith	Thursday	2:00 pm - 2:50 pm	CB 335
007	Tefjol Pllaha	Thursday	3:30 am - 4:20 pm	CB 337
008	Fouche Smith	Thursday	3:30 am - 4:20 pm	CB 335

Course Web Page: http://www.ma162.org

Homework Web Page: http://www.webassign.net/
You will need to setup an a *Web Assign* account. Registration instructions are posted on the course webpage under the "Homework" heading. This account will give you access to the online homework as well as an e-book copy of the course text.

Web Homework: Generally you will have two *Web Assign* assignments per week. They will be due Tuesday and Friday at 6:00 pm. The first web homework will be due Friday, September 5th. Extensions for web homework are rare and will only be given if you have a documented university excused absence. See the "Excused Absences" section below for what is considered an excused absence. The web homework contributes 10% to your course grade.

Textbook: The official course textbook is the 11th edition of **Finite Mathematics for the Managerial, Life, and Social Sciences** by Tan. I expect you to read the assigned sections of the textbook and I expect you to work the recommended practice problems from the textbook. However, you are not required to have a physical copy of the text because an e-book of the text is included with your *Web Assign* account.

Calculator: You will need a calculator to perform certain calculations on exams. Scientific calculators (like the TI-30X) or business calculators (like the BA-II) will be adequate. Graphing calculators are allowed but they are not required. However, exam questions will be written to ensure that students with graphing calculators do not have an unfair advantage. Exam proctors reserve the right to clear the memory of any calculator you bring into the exam room. Note that **you will not be allowed to use the calculator on a cell phone**, or any other communication device.

Course Description: Finite mathematics with applications to business, biology, and the social sciences. Linear functions and inequalities, matrix algebra, linear programming, probability. Emphasis on setting up mathematical models from stated problems. Prereq: MA 109 or equivalent.

Course Goals/Student Learning Outcomes: This course will emphasize computational and modeling aspects of mathematics. The course will also require you to effectively communicate your solutions. This means that by the end of the semester you should be able to: *setup* application or word problems, *explain the result* of a computation, *interpret* formulas or processes, and *clearly communicate* your solution process, in addition to *getting the "right" answer*.

The web homework is only capable of testing your computational ability. Recitations, lecture, recommended readings, and suggested practice problems will help develop your modeling and mathematical communication skills.

Course Help: If you find that you need help in the course, see your instructor right away - take advantage of office hours or ask to schedule an appointment. Also, faculty members, graduate students, and undergraduate students are available to answer questions in the Mathskeller, CB 063, Monday - Friday, 9-5, `http://www.mathskeller.com`. The Study, `http://www.uky.edu/AE/`, offers peer tutoring.

Course Outline: The course will be divided into four units shown below. This is a tentative schedule and subject to change. A detailed schedule will be updated throughout the semester on the course webpage.

Unit #1	Linear Algebra	August 27th - September 17th
Unit #2	Linear Programming	Septmeber 24th - October 15th
Unit #3	Counting and Probability	October 22nd - November 12th
Unit #4	Financial Mathematics	November 19th - December 10th

Grading:

Recitation/Participation	10%
Web Homework	10%
Exam #1	20%
Exam #2	20%
Exam #3	20%
Exam #4	20%

Course grades will be assigned on the standard scale: $90 - 100\%$ is an A, $80 - 89\%$ is a B, $70 - 79\%$ is a C, $60 - 69\%$ is a D, and below 60% is an E.

Recitation/Participation: Your recitation instructor will explain how your recitation/participation points will be awarded. Recitation contributes 10% to your course grade.

Readings and recommended practice problems: You will find recommended readings and suggested practice problems listed at `http://www.ma162.org`. Even though these do not directly contribute to your grade, you must keep up with these readings and practice problems in order to be fully prepared for examinations.

Exams: EXAMS ARE HELD ON MONDAY EVENINGS FROM 5:00 - 7:00 pm! The dates are:

Exam #1   September 22nd
Exam #2   October 20th
Exam #3   November 17th

The exams will include a combination of multiple choice, true/false, matching, and short answer questions. These questions will be graded on an *all or nothing* basis. Exams will also have some "free-response" questions. These will either require you to perform a lengthy calculation or will require you to setup, solve, and interpret an application problem. The free response questions will be graded both in terms of computational correctness and in terms of how well you communicate your answer/solutions. This means that a well-supported, easy to follow solution may receive almost full credit, even if the "final answer" is wrong; it also means that a sloppily written, hard to follow solution may receive very little credit, even if the "final answer" in correct.

If you have a legitimate, university conflict with the exam times (for example: marching band practice, another class from 5-7 on Mondays, traveling with a sports team) you must notify your instructor no later than one week before the exam so makeup arrangements can be made. Failure to meet this deadline will result in a 10 point penalty on your exam score.

Final Exam: The final exam time is different than the previous exams. The final exam is

Tuesday, December 16 from 6:00 - 8:00 pm

The location for the final exam will be announced in class and on the website later in the semester.

Excused Absences: University Senate Rule 5.2.4.2 defines the following as acceptable reasons for excused absences:

1. serious illness;

2. illness or death of family member;

3. University-related trips;

4. major religious holidays;

5. other circumstances your instructor finds to be "reasonable cause for nonattendance".

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day for adding a class. It is almost always possible to notify your instructor of an excused absence before class. Students who have excused absences due to University-related trips or major religious holidays must inform the instructor prior to the absence and must complete all work prior to the absence. Students who are ill must inform the instructor of their absence(s) as soon as they return to class and they must provide documentation to demonstrate that the absence(s) was excused. Students who have excused absences due to illness or the death of a family member will be allowed to make up any missed work in a timely manner. These arrangements must be made with the instructor on a case-by-case basis. Documentation for illness or death of a family member must be provided within one week of returning to classes.

Academic Integrity, Cheating, and Plagiarism: You should feel free to study with friends, but any work you submit for a grade should be your own work. This applies to all exams, quizzes, and writing assignments, with the exception of assignments that are specifically designated as group assignments.

Academic dishonesty, in any form, will not be tolerated. This includes, but is not limited to, copying a classmate's work, allowing a classmate to copy your work, modifying an exam after it has been handed back in an attempt to deceive the instructor into believing the assignment was graded incorrectly, using a cell phone during an exam. A student found guilty of academic dishonesty will receive an automatic E on the assignment, and in some cases the offense may lead to an E for the course, academic probation, or even expulsion. See sections 6.3.1 and 6.3.2 at `www.uky.edu/StudentAffairs/Code/part2.html` for more information regarding academic integrity.

Disability Accommodations: 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, 859-257-2754, email address jkarnes@uky.edu) for coordination of campus disability services available to students with disabilities.

Suggestions: Constructive suggestions about the course are welcome at any time. I welcome suggestions that will improve the course both this semester and in future semesters. If you have any concerns, please bring them to my attention first. Further recourse is available through the office of the Department Ombud and the Department Chair. Both the Ombud and the Chair can be reached from the main office in POT 719.

Classroom Behavior, Decorum, and Civility: I expect that you will not only attend class, but that you will participate in class. I expect that you will be respectful of yourself and others. Please turn off your cell phones when you enter class. Please do not work on other classes during class. Please do not surf the internet during class. Please do not read the newspaper during class, work on Sudoku, etc. during class. Please do not talk or whisper during lecture unless the instructor has given you the floor. In a classroom it is difficult for other students and the instructor to hear if there are several little conversations taking place at the same time.

The university, college and department has a commitment to respect the dignity of all and to value differences among members of our academic community. There exists the role of discussion and debate in academic discovery and the right of all to respectfully disagree from time-to-time. Students clearly have the right to take reasoned exception and to voice opinions contrary to those offered by the instructor and/or other students (S.R. 6.1.2). Equally, a faculty member has the right—and the responsibility—to ensure that all academic discourse occurs in a context characterized by respect and civility. Obviously, the accepted level of civility would not include attacks of a personal nature or statements denigrating another on the basis of race, sex, religion, sexual orientation, age, national/regional origin or other such irrelevant factors. Students who are not respectful, not civil, or disruptive in any way may be asked to leave the class.