

MA 111 – 403: INTRODUCTION TO CONTEMPORARY MATHEMATICS

Fall 2008 Syllabus

Tuesdays & Thursdays 6:00 – 7:15 PM

Funkhouser Building room 307A

Instructor:

Bruce T. Manley

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Office Hours:

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>Tuesdays 4:00 PM to 5:00 PM

>Thursdays 4:00 PM to 5:00 PM

>Fridays 2:00 PM to 3:00 PM

Course Description:

An introduction to concepts and applications of mathematics, with examples drawn from such areas as voting methods, apportionment, consumer finance, graph theory, tilings, polyhedra, number theory, and game theory. This course is not available for credit to persons who have received credit in any mathematics course of a higher number with the exceptions of MA 112, 123, 162, 201 and 202. This course does not serve as a prerequisite for any calculus course. Credit not available on the basis of special examination. Prereq: Two years of high school algebra and a Math ACTE score of 19 or above, or MA 108R, or math placement test.

Course Objectives:

Upon completion of this course, the student will be able to:

- ✓ Function responsibly in the natural, social, and technological environment
- ✓ Locate, select, organize, and present information efficiently
- ✓ Think and reason analytically
- ✓ Communicate accurately and effectively
- ✓ Make informed decisions
- ✓ Develop life skills

Text and Materials:

Excursions in Modern Mathematics with Mini-Excursions, Custom Edition The University of Kentucky by Peter Tannenbaum. A scientific calculator is recommended.

Evaluation:

Tests	03 x 100 pts = 300 pts (60%)
Homework	03 x 040 pts = 120 pts (24%)
Quizzes	11 x 005 pts = 055 pts (11%)
Attendance	01 x 025 pts = 025 pts (05%)
Total500pts (100%)

The course grade will be based on two exams, and a final exam, a homework score, and an attendance grade. Each exam counts 100 points, the final counts 100 points, homework counts 120 points, quizzes count 55 points, and

attendance counts 25 points. Thus you can earn a total of 500 points for the course. Your final grade for the course will be based on the total points you have earned as follows:

A	90% - 100%	450 - 500 points
B	80% - 89%	400 - 449 points
C	70% - 79%	350 - 399 points
D	60% - 69%	300 - 349 points
E	Below 60%	000 - 299 points

Quizzes will be given at least every week. I will only grade the top 11 quiz scores, therefore the more quizzes we take above and beyond 11 the more low scores you get to drop. There will be no make-up quizzes. If a quiz is missed it will automatically be one of your lowest scores dropped.

Americans with Disabilities Act (ADA):

In compliance with the ADA, all students with a documented disability are entitled to reasonable accommodations and services to support their academic success and safety. Though a request for services may be made at any time, services are best applied when they are requested at or before the start of the semester. To receive accommodations and services the student should immediately contact the Disability Resource Center, 2 Alumni Gym, Lexington, Ky 40506-0029. V/TDD (859) 257-2754

Important Dates:

Friday November 7th is the last day to drop a full-term class or withdraw from school with an automatic grade of "W".

📞 Math problems? Call 1-800-[(10x)(13i)²]-[sin(xy)/2.362x]

📞 All cell phones and pagers should be turned off before attending class.

📞 Cell phones are prohibited for calculator use on all exams.

Rules for Success:

It is virtually impossible to learn Mathematics by only listening to an instructor. To understand what this means, consider the impossibility of learning to play basketball by listening to someone describe how to play it. 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 instructor's task is that of an assistant to help you learn as much of the material as you desire. 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 that you are able to do problems similar to, but not identical to, the ones we work in class.

Avoid the dark side. Cheating or plagiarism is a serious offense and it will not be tolerated. It will be thoroughly investigated, and it might lead to failure in the course or even to expulsion from the university. See Student Rights and Responsibilities (Sections 6.3.1 and 6.3.2) for information on cheating, plagiarism, and penalties. A summary of recent changes to rules on cheating can be found at the Academic Ombud website. It's not worth it, so don't do it. Almost without exception, cheating does not lead to higher grades. You might be able to squeak through a problem here or there, but pretty soon you will be in the middle of material that depends on material previously covered. Cheating is a high risk with no reward, and results in a grade of 0. (Now we know what you're thinking. Of course a bunch of professors are going to say that. They are required to say that by some sort of Newtonian oath they took when they signed on here at UK. It's the same oath that says they have to erase the board for the next professor at

the end of each class. But in fact, there is no such oath. Cheating is really more likely to flush you down the tubes than to help you. And we erase the board only if we like the next professor.)

Tentative Course Outline:

Subject to change at instructor's discretion

Week	Day	Date	Outline
01	Thursday	08/28/2008	1.1
02	Tuesday	09/02/2008	1.2, 1.3
	Thursday	09/04/2008	1.4, 1.5
03	Tuesday	09/09/2008	1.6
	Thursday	09/11/2008	2.1, 2.2
04	Tuesday	09/16/2008	2.3
	Thursday	09/18/2008	2.4, 2.5
05	Tuesday	09/23/2008	4.1, 4.2
	Thursday	09/25/2008	4.3
06	Tuesday	09/30/2008	4.4
	Thursday	10/02/2008	Exam #1
07	Tuesday	10/07/2008	5.1, 5.2
	Thursday	10/09/2008	5.3, 5.4
08	Tuesday	10/14/2008	5.5, 5.6
	Thursday	10/16/2008	5.7
09	Tuesday	10/21/2008	6.1, 6.2
	Thursday	10/23/2008	6.3, 6.4
10	Tuesday	10/28/2008	6.5, 6.6
	Thursday	10/30/2008	6.7, 6.8
11	Tuesday	11/04/2008	Election Day – No Class
	Thursday	11/06/2008	Exam #2
12	Tuesday	11/11/2008	9.1,
	Thursday	11/13/2008	9.2, 9.3
13	Tuesday	11/18/2008	9.4
	Thursday	11/20/2008	10.1
14	Tuesday	11/25/2008	Thanksgiving Day – No Class
	Thursday	11/27/2008	10.2, 10.3
15	Tuesday	12/02/2008	10.4
	Thursday	12/04/2008	Mini-Excursion 3
16	Tuesday	12/09/2008	11.1, 11.2
	Thursday	12/11/2008	11.3
17	Tuesday	12/16/2008	Final Exam

Personal Safety Reminder for Evening Sessions:

Please be mindful of your personal safety in traveling to or from class after dark. It is recommended that students enrolled in evening sections do not walk to or from class alone. Anyone desiring an escort may arrange for one through the UK Campus Escort Program, SAFECATS. For information call 323-FREE or 323-3733. Students are also encouraged to choose the "Cat's Path" routes when traversing campus at night. These are sidewalks clearly marked with a blue and white paw print logo and are routes frequently used and accessible to major campus destinations. Though these paths are not designed to replace personal safety efforts, such as traveling in groups and remaining alert, there is increased police presence on these pathways.