**Course Information** 

#### MA 111 — Introduction to Contemporary Mathematics

Section 003

#### Refer to the syllabus for detailed information

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### Instructor Information

Carl Lee Office: 967 POT Phone: 257-1405 Email: lee@ms.uky.edu

Office Hours: Monday and Friday, 10–11 am, POT 967 Wednesday, 10-11 am, Mathskeller, CB 063 Also available by appointment Important Websites

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My course website:
http:
//www.ms.uky.edu/~lee/ma111fa11/ma111fa11.html
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Blackboard website: http://elearning.uky.edu

Pearson homework website: http://PearsonMyLabAndMastering.com Pearson course ID for my section: lee31353

# **Course Materials**

Text: *Excursions in Modern Mathematics for the University of Kentucky with MyMathLab*, Peter Tannenbaum, Pearson, ISBN: 1-256-30145-0.

Calculator: scientific calculator, but not on a cell phone or other communication device while taking exams. A graphing calculator is not necessary.

### Credit and Prerequisites

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.

# **UK** Core

This course satisfies the *Quantitative Foundations* requirement of the UK Core General Education program, http://www.uky.edu/GenEd.

## Learning Outcomes

This course will be an introduction to some modern mathematical methods in application to real life problems. It is expected that by the end of the semester, students will acquire an informal understanding of a variety of new mathematical methods and will be able to appreciate their power and beauty. Students will demonstrate proficiency with number sense and with functional relationships, apply fundamental elements of mathematical knowledge to model and solve problems drawn from real life.

### Topics

We will begin the semester by investigating methods for determining the outcome of elections, and compare them according to various fairness criteria (Chapter 1). Then we will turn to matters of money; in particular, the fundamental elements surrounding interest, loans and credit cards, and saving money (Chapter 10). The third unit of the course will focus on a topic with both practical and recreational aspects—navigating through graphs (networks) (Chapter 5). In the fourth unit we will see how to use mathematical principles to analyze the beauty of symmetry-natural and human-made (Chapter 11). Finally, we end the course with an analysis of methods of fairly dividing resources among several people (Chapter 3).

# Grading

Attendance and Participation	5%
Quizzes	10%
Homework	30%
Project	5%
Exam 1	10%
Exam 2	10%
Exam 3	10%
Exam 4	10%
Exam 5	10%

# Grading

Your grade will be based on the following percentages (rounded to the nearest whole percent):

- A 90%-100%
- B 80%-89%
- C 70%-79%
- D 60%-69%
- E 0%-59%

### Attendance

The Attendance and Class Participation portion of your grade will be based on attendance sheets and other tasks that may be completed in class.

# Quizzes

There will be frequent in-class quizzes, but not necessarily given on the same day each week.

## Homework

You will have both online homework assignments through the Pearson website and written assignments. All assignments will be posted as announcements in Blackboard, which you should check on a daily basis.

# Project

A description of the requirements of the project will be provided by the instructor later in the semester.

#### Exams

We will have four midterm exams and one final exam. The four midterm exams will be given during class. The final exam will be given on Friday, December 16, 1-3 pm, in our regular room. The final exam is not cumulative.

# Course Help

If you find that you need help in the course, see your instructor right away—take advantage of his/her 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, M–F, 9–5, http://www.mathskeller.com.

# Other Matters

Consult the syllabus for information on excused absences; academic integrity, cheating, and plagiarism; and disability accommodations.

### Tentative Course Schedule

- ▶ 24 August 2011 (Wednesday) First Day of Classes
- ▶ 30 August 2011 (Tuesday) Last Day to Add a Class
- 05 September 2011 (Monday) Labor Day NO SCHOOL
- 14 September 2011 (Wednesday) Last Day to Withdraw from a Class without Receiving a Grade
- 04 November 2011 (Friday) Last Day to Withdraw from a Class
- 23–26 November 2011 (Wednesday-Saturday) Thanksgiving — NO SCHOOL
- 09 December 2011 (Friday) Last Day of Classes

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#### Tentative Course Schedule

- Chapter 1 August 26 to September 9 Exam #1 on Monday, September 12.
- Chapter 10 September 14 to September 30 Exam #2 on Monday, October 3.
- Chapter 5 October 5 to October 21 Exam #3 on Monday, October 24.
- Chapter 11 October 26 to November 14 Exam #4 on Wednesday, November 16.
- Chapter 3 November 18 to December 9 Exam #5 (Final Exam) on Friday, December 16, 1-3 pm, in our regular classroom.