## MA 111: Intro to Contemporary Mathematics, Section 008

College of Arts & Sciences (A& S) Department of Mathematics (MA) Fall 2015

Please read this syllabus carefully. It contains essential information about the course organization, grading, tests, etc. See related links to webpages for additional information on selected topics.

### Instructor Information:

Instructor: Dr. Katherine Paullin Office: Patterson Office Tower 829 (POT 829) Email: katherine.paullin@uky.edu (The best method of contact!) Office Hours: MWF 9-10 AM, POT 829, Tues, 9-10 AM, Mathskeller, CB 063, Other times available by appointment.

Class Time and Location: *MWF 1:00 AM - 1:50 PM, FPAT 257* Course Web Page: http://www.ms.uky.edu/~klpa237/ Click on MA111 link.

**Clickers:** You will need to purchase a Clicker for this course. You can find them at the campus bookstore. **Textbook:** A textbook is not required. Lecture materials on upcoming topics will be posted on the course website before each class meeting.

### Course Goals:

- To expose students to a variety of mathematical topics, many of which they would never see in a traditional algebra-based math class.
- To encourage students to persist in solving problems and to develop an appreciation for the beauty of mathematical solutions.
- To recognize the value of mathematics in solving a variety of practical (and fun!) problems in society and culture.

**Student 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. By the end of the semester, students should be able to demonstrate a proficiency in the application of mathematical knowledge for modeling solutions to questions drawn from real life.

**Course Help:** If you find that you need help in the course, then you should visit Dr. Paullin AS SOON AS POSSIBLE! If the posted office hours do not work with your schedule then you should ask about making an appointment.

Additional help can be found from faculty members, graduate students, and undergraduate students available in the Mathskeller, CB 063, M-F, 9-5, http://www.mathskeller.com.

Other resources (like The Study, your math major roommate, or whatever) can also be good, but not nearly as good as the other resources listed above.

Grading: You will be evaluated in the course in the areas below, weighted by the given point system.Attendance100 pointsProject50 pointsHomework100 pointsMini-Exams50 points each ( $\times 2$  out of 4)Exams100 points each ( $\times 3$  out of 4)

<u>Two</u> Mini-Exam scores and <u>One</u> Exam score will be dropped from your final grade.

See the sections on Mini-Exams and Exams for more information.

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

A	90%- $100%$	(585+ points)
B	80%- $89%$	(520-584 points)
C	70%-79%	(455-519 points)
D	60%- $69%$	(390-454 points)
E	0%- $59%$	(0-389 points)

Attendance: This portion of your grade will be earned by attending class on a regular basis (without arriving late or leaving early), completing in-class assignments, and actively participating in the lesson. You will often be allowed (and encouraged) to work in groups during our class meetings.

Your attendance grade is computed using clicker data. Each day of you clicking in for all questions earns you 2.5 points. There are 41 class days, for a total of  $41 \cdot 2.5 = 102.5$  points. Being tardy or leaving early will deduct a point from the day's score.

**Project:** This portion of your grade will be earned by completing a written project. I will go into more detail about the project in the middle of the semester.

**Homework:** This portion of your grade will be earned by completing individual online assignments outside of class. These assignments will include an online portion at

#### http://webwork.as.uky.edu/webwork2/MA111-Paullin/

**Mini-Exams:** We will have a mini-exam midway through each of the four covered topics. Although (two of) these will contribute to your overall grade, they are designed more to give you an idea of the progress that you are making with the material. We will spend 20-25 minutes on mini-exam days taking the mini-exam itself, and then cover new material for the rest of that day.

At the end of the semester, your grade is determined by your **highest two** mini-exam scores.

**Exams:** We will have four exams throughout the semester, one for each of the topics we cover. Three out of four of these will contribute to your overall grade. Note that the exam during Finals week is Exam 4. At the end of the semester, your grade is determined by your **highest three** exam scores.

**Note on Calculators:** *Please see this page for a description of permitted calculators which may be used on exams and mini-exams:* 

### http://www.actstudent.org/faq/calculator.html

You do not need a graphing calculator for this course; you will only need a basic calculator that can do addition, subtraction, multiplication, division, and exponents.

### Rules and Regulations

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

**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".

Be prepared to supply documentation for any absence you want to be counted as excused. Students who have excused absences due to University-related trips or major religious holidays must inform the instructor prior to the absence. Students who are ill must inform the instructor of their absence(s) as soon as they return to class. Students who have excused absences 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.

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 any assignment that is specifically designated as a group assignment.

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. 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 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 (Suite 407, Multidisciplinary Science Building, 859-257-2754, email address dtbeac1@uky.edu) for coordination of campus disability services available to students with disabilities.

**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. Students who are not respectful, not civil, or disruptive in any way may be asked to leave the class, with all subsequent penalties applied to their grade.

Although cell phones and laptops are both highly useful parts of our society, neither should be disruptive in the classroom. Cell phones in the classroom should be silenced or at least set to vibrate. Although I do not suggest taking notes on your laptop computer, you may choose to attempt to do so. Please take care to not disrupt the learning environment of other students by browsing email, social networking sites, etc.

During an exam, cell phones will be turned off. The use of translators or other electronic devices, other than a calculator, is strictly prohibited on exams.

# Important Math 111 Dates:

The following is a list of exam dates for the Fall 2015 semester (TENTATIVE!):

Wednesday, September 9: Mini-Exam 1 Wednesday, October 7: Mini-Exam 2 Wednesday, November 4: Mini-Exam 3 Wednesday, December 2: Mini-Exam 4 Wednesday, September 23: Exam 1 Wednesday, October 21: Exam 2 Friday, November 13: Exam 3

Final Exam (Exam 4): Wednesday, December 16, 1:00 - 3:00 PM

#### **Important Semester Dates:**

The following is a list of important dates for the Fall 2015 semester:

- Wednesday, August 26: First day of classes
- Tuesday, September 1: Last day to add a class
- Monday, September 7: Labor Day break (academic holiday)
- Wednesday, September 16: Last day to drop a class without receiving a grade
- Monday, October 19: Midterm of Fall 2015 semester
- Friday, November 13: Last day to withdraw from a class
- Wed-Fri, November 25–27: Thanksgiving break (academic holiday)
- Friday, December 11: Last day of classes