

## MA 111: Intro to Contemporary Mathematics, Section 007

College of Arts & Sciences (A&S)  
Department of Mathematics (MA)  
Fall 2014

### Instructor Information:

**Instructor:** erica j. Whitaker  
**Office:** Patterson Office Tower 741 (POT 741)  
**Email:** [ewhitaker@uky.edu](mailto:ewhitaker@uky.edu) (The best way to reach me! )  
**Telephone:** Office phone: 859-257-6792; Home phone 606-462-3328  
**Office Hours:** In my office, POT 741: MW 4:15 – 5:15, Friday 11:15 – 12:15.  
In the Mathskeller, CB 063: T/Th 2:15 – 3:15  
Other times available by appointment: send an email or stop by my office.

**Class Time and Location:** T/Th 12:30 – 1:45, CB 114

**Instructor Web Page:** <http://www.ms.uky.edu/~ejwh226/>

**Textbook:** A textbook is **not required**. Lecture slides and notes on upcoming topics will be posted on the course website before each class meeting. Find the course website by following links from my website above.

**Suggested Textbooks:** If you would like to have references beyond the notes provided for the class, the following are worth a look. Keep in mind that notation and terminology might differ from what we use in class, but the explanations and examples can still be helpful!

1. **Math in Society** by David Lippman; this is available free online at <http://www.opentextbookstore.com/mathinsociety/>
2. **Excursions in Modern Mathematics** by Peter Tannenbaum; old editions are fine!
3. **For All Practical Purposes** by COMAP; old editions are fine!

### 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 see Dr. Whitaker 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 resources listed above.

**Grading:** You will be evaluated in the course in the areas below, weighted by the given percentages.

|                 |                |
|-----------------|----------------|
| Professionalism | 7.5%           |
| Project         | 10%            |
| Homework        | 15%            |
| Mini-Exams      | 7.5% each (×3) |
| Exams           | 15% each (×3)  |

(One mini-exam score and one exam score will be dropped from your final grade.)

Your overall letter 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% |
|------------|-----------|-----------|-----------|----------|

**Professionalism:** 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 (so turn off or silence your cell phones). You will often be allowed (and encouraged) to work in groups during our class meeting.

**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 assignments outside of class. These assignments will include an online portion at

<http://webwork.as.uky.edu/webwork2/MA111-Whitaker/>

Details on using the homework site will be provided later.

**Mini-Exams:** We will have a mini-exam midway through each of the four topics. 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, then cover new material. Your best three scores will count towards your course grade.

**Exams:** We will have four exams throughout the semester, one for each of the topics we cover. For each exam there will be a review worksheet provided and before each exam we will have time for in-class review (at least half of a day).

**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.”

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.

Students who have university excused absences or who have university-scheduled class conflicts with uniform examinations need to make arrangements to take exam at an alternate time. **According to university policy**, it is the student's responsibility to resolve scheduling conflicts with common hour exams, and this must be done **at least TWO WEEKS before the exam**. If you fail to inform your instructor of exam conflicts in timely manner, a penalty will be assessed on your exam score.

**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 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 of the University Senate Rules](#) 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 (Room 2, Alumni Gym, 859-257-2754, email address [jkarnes@email.uky.edu](mailto:jkarnes@email.uky.edu)) for coordination of campus disability services available to students with disabilities.

**Suggestions:** Constructive suggestions for this course are welcome at any time. I welcome suggestions that will improve the course both this semester and in semesters to come. 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 our 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 sleep 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, with all subsequent penalties applied to their grade.

### **Important Math 111 Dates:**

The following is a list of exam dates for the Fall 2014 semester (TENTATIVE!):

- Mini-Exam 1                      Thursday, September 11
- Exam 1                              Thursday, September 25
- Mini-Exam 2                      Thursday, October 9
- Exam 2                              Thursday, October 23
- Mini-Exam 3                      Thursday, November 6
- Exam 3                              Thursday, November 13
- Mini-Exam 4                      Thursday, December 4
- Final Exam:                      Tuesday, December 16 10:30 a.m. - 12:30pm

### **Important Semester Dates:**

The following is a list of important dates for the Fall 2014 semester:

- Thursday, August 28: First day of classes
- Monday, September 1: Labor Day break (academic holiday)
- Wednesday, September 3: Last day to add a class
- Wednesday, September 17: Last day to drop a class without receiving a grade
- Monday, October 20: Midterm of Fall 2013 Semester
- November 26-29: Thanksgiving break (academic holiday)
- Friday, November 7: Last day to withdraw from a class
- Friday, December 12: Last day of classes