Course Title: Introduction to Contemporary Mathematics
Course Code: MA 111 - Section 018
Meeting Time: MWF, 9:00 AM - 9:50 AM
Classroom: Whitehall Classroom Building, CB 335
Website: http://www.ms.uky.edu/~houghw/MA111
Textbook: Math in Society, by David Lippman et al., 2nd Ed. The free online text is available at http://www.opentextbookstore.com/mathinsociety/.

Instructor: Mr. Wesley K. Hough
E-mail: wesley.hough@uky.edu (preferred contact method)
Office: Patterson Office Tower, POT 706
Office Phone: 859-257-6805
Office Hours: Monday: 3 PM to 4 PM (in the Mathskeller)
Tuesday: 11 AM to 12 PM (in POT 706)
Thursday: 10 AM to 12 PM (in POT 706)
Other times available by appointment.

Course Description: MA 111 is an introduction to concepts and applications of mathematics, with examples drawn from areas such as voting methods, consumer finance, graph theory, number theory, geometry, topology, and game theory.

This course is not available for credit to individuals 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 is not available on the basis of special examination.

Prerequisites: Two years of high school algebra and a Math ACTE score of 19 or above, MA 108R, or math placement test.

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.

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 and solving problems drawn from real life.
Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exams</td>
<td>300</td>
</tr>
<tr>
<td>Quizzes</td>
<td>100</td>
</tr>
<tr>
<td>Homework</td>
<td>135</td>
</tr>
<tr>
<td>Written Project</td>
<td>30</td>
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<tr>
<td>Professionalism</td>
<td>135</td>
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Your grade will be based on the following point system:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points Range</th>
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<tbody>
<tr>
<td>A</td>
<td>630 - 700</td>
</tr>
<tr>
<td>B</td>
<td>560 - 629</td>
</tr>
<tr>
<td>C</td>
<td>490 - 559</td>
</tr>
<tr>
<td>D</td>
<td>420 - 489</td>
</tr>
<tr>
<td>E</td>
<td>0 - 419</td>
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**Exams:** There will be four unit exams during the semester. The first three will be administered during class meeting times while the fourth will be administered during the assigned final exam period. There is no comprehensive final. Each exam is worth 100 points, and I will drop your lowest exam score when calculating your final grade. The exams will consist of a mixture of multiple choice and free response questions, and at least half of the class day prior to each exam will be set aside for review purposes. The tentative exam dates are:

- Exam 1  Wednesday, September 25
- Exam 2  Wednesday, October 23
- Exam 3  Friday, November 15
- Exam 4  Tuesday, December 17

If you have a legitimate university conflict for the day of the exam, you must notify me at least a week before the exam. Alternate exam arrangements will be made on a case-by-case basis. A 10-point penalty may be levied on your exam score if your instructor is not notified of your exam conflict at least a week before the exam.

**Quizzes:** There will be four quizzes during the semester, and each will be administered near the halfway point of each unit. Their purpose is to give you an idea of the progress that you are making with the material. Each quiz is worth 50 points, and I will drop the two lowest quiz scores when calculating your final grade. Like the exams, the quizzes will consist of a mixture of multiple choice and free response questions. On quiz days, we will spend the first 20-25 minutes on the quiz and then move on to new material. The tentative quiz dates are:

- Quiz 1  Wednesday, September 11
- Quiz 2  Wednesday, October 9
- Quiz 3  Wednesday, November 6
- Quiz 4  Wednesday, December 4

**Written Projects:** There will be a written project to be completed outside of class and submitted via Blackboard. The project is worth 30 points total, and more specific information will be handed out at the appropriate time during the semester.
**Homework:** This portion of your grade will be earned by completing individual assignments outside of class. These assignments will predominantly consist of problem sets in the online WeB-WorK system (http://webwork2.ms.uky.edu/webwork2/ma111-17-18/), but there may be some worksheets from the course webpage that you will need to download and complete from time to time. There will usually be an assignment for each class meeting. We may also have unannounced homework quizzes whose points go toward your homework score.

**Professionalism:** This portion of your grade will be earned by attending class on a regular basis, completing in-class assignments, and actively participating in the lesson. You will often be allowed (and encouraged) to work in groups during our class meeting. Unexcused absences, using your cell phone in class, asking off-topic questions, and being generally disruptive would negatively affect your professionalism score.

**Course Help:** If you find that you need help in the course, then you should visit Mr. Hough in his office (POT 706) 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 mathematics faculty members, graduate students, and undergraduate students working in the Mathskeller, CB 063, M-F, 9-5, http://www.mathskeller.com.

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

**Suggestions:** 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 course coordinator (Dr. Martin Montgomery; POT 963; martin.montgomery@uky.edu), 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.
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 that you wanted counted as “excused.” 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 (Wednesday, September 4). 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/were 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 will be made with the instructor on a case-by-case basis. Documentation for excused absences will be accepted only for the two-week window following the absence.

Academic Integrity, Cheating, and Plagiarism: You should feel free to study with friends and classmates, 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, using a calculator during an exam to recall a previously stored formula, etc. 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 suspension, 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 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, 859-227-2754, email address jkarnes@email.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 also participate in class. I expect that you will be respectful of yourself and others. Please turn off your cell phone when you enter class. Please refrain from working on coursework for other classes, surfing the internet, reading the newspaper, sleeping, etc. during our class time. 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 disrespectful, not civil, or disruptive in any way may be asked to leave the class, with all subsequent penalties applied to their grade.

Important Dates:

- Wednesday, August 28: First day of classes
- Monday, September 2: Labor Day (academic holiday)
- Wednesday, September 4: Last day to add a class
- Wednesday, September 18: Last day to drop a class without receiving a grade
- Monday, October 21: Midterm of Fall 2013 Semester
- Friday, November 8: Last day to withdraw from a class
- November 27-30: Thanksgiving break (academic holiday)
- December 13: Last day of classes