MA 111: Intro to Contemporary Mathematics, Section 010/011

College of Arts & Sciences (A&S) Department of Mathematics (MA) Spring 2018

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. If you need more explanation <u>ON AN ISSUE NOT COVERED HERE OR ON THE RELATED WEBPAGES</u>, please do not hesitate to ask Professor Herschenfeld.

Instructor Information:

Instructor: Samuel Herschenfeld Office: Patterson Office Tower 806 (POT 806) Email: samuel.herschenfeld@uky.edu (The best method of contact!) Office Hours: T,R 3:20-4:20, POT 806, F, 11:00-12:00, Mathskeller, CB 063, Other times available by appointment.

Note that my office hours are by default a casual, drop-in affair and often I'll discuss material with multiple students at a time. If you'd like to discuss your grade or anything else without other students present, let me know in advance and I'll arrange those office hours differently.

Class Time and Location:

T/R 12:30 - 1:45, CB 246 (section 10) T/R 2:00 - 3:15, CP 297 (section 11)

Course Web Page: We will use Canvas for this course

Textbook: A textbook is not required. See Canvas for slides and other online resources.

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 Professor. Herschenfeld, 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.

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

| 8% |
|-------------------------|
| 7% |
| 20% |
| 20% (average of best 3) |
| 45% (average of best 3) |
| |

<u>One</u> Mini-Exam score 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. Grades are rounded to the nearest percent:

| А | 90%- $100%$ |
|---|-------------|
| В | 80%- $89%$ |
| С | 70%- $79%$ |
| D | 60%- $69%$ |
| Е | 0%- $59%$ |

Participation: We will have short quizzes or in class worksheets most days (on occasion I may take roll). Attendance and general class participation/professionalism may influence this score (our classroom is a place of learning and everyone must feel welcome there. We are expected to treat everyone with respect and maintain language and behavior conducive to everyone's learning - see university senate rule 6.1.2 for further discussion). Do not bring food to class. Do not use cell phones in class.

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 on webwork that can be reached through the canvas page. Clicking on this link will automatically log you in to your webwork account.

Mini-Exams: We will have a mini-exam midway through each of the four covered topics. Although 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 three mini-exam scores.

Exams: We will have four exams throughout the semester, one for each of the topics we cover. Exam 4 will be at the time scheduled for our final exam (however, exam 4 will be similar in format the first three exams and will only cover our fourth topic).

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.act.org/content/act/en/products-and-services/the-act/taking-the-test/calculator-policy.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. You may not use cell phones as a calculator in this class.

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: See University Senate Rule 5.2.4.2 to see defines what qualifies as an excused absence. Be prepared to supply documentation for any absence you want to be counted as excused. You must show me this documentation within one week after the absence. Students anticipating an excused absence are responsible for notifying the instructor in writing of anticipated absences as soon as possible. Students who have excused 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 for unforeseen reasons 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.

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.

Non-Discrimination Statement and Title IX Information: The University of Kentucky faculty are committed to supporting students and upholding the University's non-discrimination policy.

Discrimination is prohibited at UK. If you experience an incident of discrimination we encourage you to report it to Institutional Equity & Equal Opportunity (IEEO) Office, 13 Main Building, (859) 257-8927.

Acts of Sex- and Gender-Based Discrimination or Interpersonal Violence: If you experience an incident of sex- or gender-based discrimination or interpersonal violence, we encourage you to report it. While you may talk to a faculty member or TA/RA/GA, understand that as a "Responsible Employee" of the University these individuals MUST report any acts of violence (including verbal bullying and sexual harassment) to the University's Title IX Coordinator in the IEEO Office. If you would like to speak with someone who may be able to afford you confidentiality, the Violence Intervention and Prevention (VIP) program (Frazee Hall Lower Level; http://www.uky.edu/StudentAffairs/VIPCenter/), the Counseling Center (106 Frazee Hall, http://www.uky.edu/StudentAffairs/Counseling/), and the University Health Services (http://ukhealthcare.uky.edu/uhs/student-health/) are confidential resources on campus.

Important Math 111 Dates:

The following is a list of exam dates for the Spring 2018 semester (**TENTATIVE!**):

Thursday, January 24: Mini-Exam 1 Thursday, February 22: Mini-Exam 2 Tuesday, March 27: Mini-Exam 3 Thursday, April 19: Mini-Exam 4 Thursday, February 8: Exam 1 Thursday, March 8: Exam 2 Thursday, April 5: Exam 3

Final Exam (Exam 4): See Final Exam Schedule on Registrar's website

Important Semester Dates:

The following is a list of important dates for the Spring 2018 semester:

- Wednesday, January 10: First day of classes
- Monday, January 15: Martin Luther King Birthday Academic Holiday
- Wednesday, January 17: Last day to add a class
- Wednesday, January 31: Last day to drop a class without receiving a grade
- Monday, March 5: Midterm of Spring 2018 semester
- Mon-Fri, March 12–16: Spring Vacation Academic Holidays
- Friday, March 30: Last day to withdraw from a class
- Friday, April 27: Last day of classes