

MA 111: Intro to Contemporary Mathematics, Section 006

College of Arts & Sciences (A&S)

Department of Mathematics (MA)

Spring 2017

Please read this syllabus carefully. It contains essential information about the course organization, grading, tests, etc. If you need more explanation ON AN ISSUE NOT COVERED HERE OR ON THE RELATED WEBPAGES, please do not hesitate to ask Dr. Denomme.

Instructor Information

- Instructor: Dr. Robert Denomme
- Office: POT 937
- Email: robert.denomme@uky.edu (<mailto:robert.denomme@uky.edu>)
- Office Hours:
 - 11am-12pm in Mathskeller on Tuesday and Thursday,
 - 2-3pm in POT 937 on Tuesday only

Class Time and Location

- MWF 1:00-1:50pm
- CP 222

Reef Polling

I will be using REEF Polling by i>clicker in class this term. REEF Polling helps me to understand what you know, gives everyone a chance to participate in class, and allows you to review the material after class. Please read the announcements on how to sign up for REEF Polling

Textbook

A textbook is not required. Lecture slides and notes on upcoming topics will be posted on the course website after each class meeting in the announcements tab.

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. Denomme *AS SOON AS POSSIBLE!* If the posted office hours do not work with your schedule then you should ask about making an appointment.

Additional free drop-in help can be found from faculty members, graduate students, and undergraduate students in the math department's peer-tutoring center: **Mathskeller** (<https://math.as.uky.edu/mathskeller>), open M-F from 9am-5pm in CB63, the basement of Whitehall Classroom Building.

Grading

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

Participation	15%
Project	10%
Homework	15%
3 Best Mini-Exams	15% (5% each)
3 Best Exams	45% (15% each)

One Mini-Exam score and One 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%
- B 80%-89%
- C 70%-79%
- D 60%-69%
- F 50%-59%

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Participation

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 using Reef polling, and actively participating in the lesson.

You will often be allowed (and encouraged) to work in groups during our class meetings.

Almost every class day that we don't have an exam, we will have some sort of worksheet or brief quiz that contributes to your participation grade. You will need to hand in any worksheet's for excused absences, but unexcused absences may not be made-up.

Project

This portion of your grade will be earned by completing a written project. I will go into more detail about the project closer to the middle of the semester.

Homework

This portion of your grade will be earned by completing individual **online assignments** outside of class. A link to these homeworks may be found in the Modules tab.

Exams

We will have four exams throughout the semester, one for each of the topics we cover. The course is not cumulative, and the material for each exam does not depend on the others. At the end of the class we will drop your lowest exam score, so three out of four of these will contribute to your overall grade. Note that the exam during Finals week is Exam 4, and it is not a cumulative exam!

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 in class 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 three highest mini-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> (<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> (<http://www.uky.edu/GenEd>).

Excused Absences

You are allotted 5 total absences before it starts affecting your grade. I will be taking attendance through Reef polling, which uses a smartphone or laptop. Please bring this device with you to class with enough battery to make it all the way through.

University Senate Rule 5.2.4.2 defines the following as acceptable reasons for excused absences:

- serious illness
- illness or death of family member
- University-related trips
- major religious holidays
- 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. You must show me this documentation within one week after the absence. 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.

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 (<http://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 (<mailto: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

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 *do not bring food items in the classroom*. Any drinks you bring into the classroom must come in a

container with a lid or cap. Please *silence your cell phones* when you enter class, but keep them on and connected to Wi-Fi if you use your phone for REEF polling. Please do not work on other classes during lecture. 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 semester

Mini-Exam 1 Wed. Jan. 25

Mini-Exam 2 Wed. Feb. 22

Mini-Exam 3 Wed. Mar. 29

Mini-Exam 4 Wed. Apr. 19

Exam 1 Wed. Feb. 8

Exam 2 Wed. Mar. 8

Exam 3 Fri. Apr. 7

Exam 4 (Final) Mon. May 1 (8am)

Important Semester Dates

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

- Wednesday January 11: First day of classes

- Wednesday, January 11: Last day of classes
- Monday, January 16: Martin Luther King Birthday – Academic Holiday
- Wednesday, January 18: Last day to add a class
- Wednesday, February 1: Last day to drop a class without receiving a grade
- Monday, March 6: Midterm of Spring 2017 semester
- Mon-Fri, March 13–17: Spring Vacation – Academic Holidays
- Friday, March 31: Last day to withdraw from a class
- Friday, April 28: Last day of classes