

## MA 111: Intro to Contemporary Mathematics, Section 002

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 ON AN ISSUE NOT COVERED HERE OR ON THE RELATED WEBPAGES, please do not hesitate to ask Dr. Nguyen.*

### Instructor Information:

*Instructor:* Nicholas D. Nguyen

*Office:* Patterson Office Tower 705 (POT 705)

*Email:* nicholas.nguyen@uky.edu (*The best method of contact!*)

*Office Hours:* MWF 10:30 AM - 11:45 AM, POT 705,

T, 9:00-10:00 AM, Mathskeller, White Hall 063,

Other times available by appointment.

**Class Time and Location:** MWF 9:00 AM - 9:50 PM, White Hall 334

**Course Web Page:** <http://www.ms.uky.edu/~ndng224/MA111/>

**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 see page 2 for information about REEF.

**Textbook:** A textbook is not required. Lecture slides and notes 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. Nguyen 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>.

### **Creating Your REEF Polling Account:**

Go to <https://www.iclicker.com/> or download the REEF Polling app for your smartphone to sign up for a REEF Polling account.

You should use your university email address and your **STUDENT ID NUMBER without the leading 9** in the Student ID field. If you need to change your email address, password, or student ID, edit your account profile. Do not create and use more than one REEF Polling account as you will only receive credit from a single account. If you are using iClicker REEF Polling in another class this term, you only need one subscription.

Creating a REEF Polling account automatically starts a free 14-day trial subscription. A 180-day subscription costs \$14.99, and can be purchased directly through REEF or by buying an access code from one of the university bookstores. If you have any difficulties with obtaining an account or with bringing a phone or laptop to class, please see your instructor.

Note: if you buy an access code, you must redeem it online at <https://www.iclicker.com/> - the code cannot be entered in the app.

See this link

<https://community.macmillan.com/community/iclicker-support/iclicker-student-support/pages/iclicker-reef-student-application>

for more information about REEF polling. You can also see this video

<https://www.youtube.com/watch?v=DRdwwsxZ6xE>

for more information about setting up an account.

### **Add This Course to Your REEF Polling Account:**

Search with the following information to find this course and add it to your REEF Polling account:

Institution: University of Kentucky

Course: MA111-S18-Nguyen-9am

You can access our iClicker REEF course by using the REEF Polling link on the Modules tab of our Canvas course page.

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

Participation	15%
Project	10%
Homework	15%
Mini-Exams	7.5% each ( $\times 2$ out of 4)
Exams	15% each ( $\times 3$ out of 4)

Two Mini-Exam scores 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. Grades are rounded to the nearest **tenth** of a percent:

A	90%-100%
B	80%-89.9%
C	70%-79.9%
D	60%-69.9%
E	0%-59.9%

**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, 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 meetings.

Please see the next page for the policies on absences and how they affect your 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-S18-Nguyen/>

Details on using the homework site will be posted later (at the same place you found this syllabus).

**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.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.

**Absence policy:** In this course, your participation grade (also known as instructor score) is computed using the REEF sessions during lecture.

- Everyone will have a certain number of their lowest scores (based on percentage) dropped during the semester. This can be used for unexcused and excused absences, or for dropping sessions where you had trouble that day. Canvas will indicate which scores it is dropping. After the third week of class, Canvas will drop:
  - Your two lowest REEF scores (before and during the midterm grading period)
  - Your four lowest REEF scores (after the midterm grading period)
- If you need more than two drops (before the midterm grading period) or four drops (after the midterm grading period) due to absences, you will need to do the following:
  - You must **show me documentation** for the absence you want to be excused beyond 2 or 4. This must be done **no later than one week after the absence**.
  - For every excused absence beyond 2 or 4 with documentation, you receive an additional drop.
  - **Canvas will report a zero for the day of the absence, but the additional drop is intended to prevent this from affecting your grade.**
  - **Canvas will not indicate these extra drops** when you view your grades, so your actual participation grade will be higher than what Canvas reports. You will need to wait for the midterm grading period and the last day of class before I can post participation grades with extra drops. Do be assured that I am keeping track of your excused absences and extra drops.

## 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. 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.

**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!**):

Wednesday, January 24: Mini-Exam 1	Wednesday, February 7: Exam 1
Wednesday, February 21: Mini-Exam 2	Wednesday, March 7: Exam 2
Wednesday, March 28: Mini-Exam 3	Friday, April 6: Exam 3
Wednesday, April 18: Mini-Exam 4	

**Final Exam (Exam 4):** Wednesday, May 2, 8:00 AM - 10:00 AM

**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