

# A&S 121-001

## MA 111 CONTEMPORARY MATHEMATICS COREQUISITE WORKSHOP

FALL 2017

UNIVERSITY OF KENTUCKY

F 9-9:50AM

FB B4

### Instructor Information:

**Instructor:** Amanda (Amy) Green

**Office:** Patterson Office Tower 951 (POT 951)

**Email:** [mrs.amy.green@uky.edu](mailto:mrs.amy.green@uky.edu) ← BEST METHOD OF CONTACT!

**Office Phone:** (859) 257-6821

**Office Hours:** Tuesday/Thursday: 11am-11:30am, Friday: 11am-1pm. POT 951.  
Other times available by appointment.

### Class Time, Location and Activities:

Friday: 9:00am – 9:50am. FB #B4 (Funkhouser Building.)

All registered students are expected to attend and participate actively in class regularly. Our workshops will include: instructor-led material, small group activities and student-led presentations, weekly homework and quizzes.

**Required co-requisite course:** MA 111-010.

**Course Webpage:** CANVAS: <https://uk.instructure.com/>

### Course Goals:

1. To stimulate and facilitate the students' understanding and comprehension of the variety of mathematical topics covered in MA 111.
2. To enhance mathematical learning of fundamental concepts in logic, algebra, graph theory and probability.
3. To encourage students to persist in solving problems and to develop an appreciation for the beauty of mathematical solutions.
4. To recognize the value of mathematics in solving a variety of practical (and fun) problems in society and culture.

### Student Learning Outcomes:

1. Develop appropriate problem-solving techniques and analytical skills necessary for everyday life.
2. Deepen the student's understanding of mathematics in preparation for future mathematics studies and degree completion.
3. Students will acquire an informal understanding of a variety of new mathematical methods and will be able to appreciate their power and beauty.
4. Students should be able to demonstrate a proficiency in the application of mathematical knowledge for modeling solutions to questions drawn from real life.

### Required Materials:

1. All MA 111-010 related material.
2. Paper and pencil.
3. Basic calculator. (No phone, tablet or laptop.)
4. Preferably a folder or 3 ring binder to keep material organized for future reference.

### Course Topics:

A&S 121 will focus on mastering the mathematical topics covered in MA 111-010 (Voting Theory, Probability, Compensation & Graph Theory) along with some fundamental topics that are needed for future mathematics' success (logic, numbers, order of operations, fractions, algebraic expressions, simplifying fractions, exponents, linear equations, simple graphs, polynomial algebra, etc.)

### Grading:

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

Participation	15%
Project	10%
Homework	15%
Mini-Exams (3 out of 4 best scores)	15% (5% each mini-exam)
Exams (3 of the 4 best scores)	45% (15% each exam)
TOTAL GRADE POSSIBLE	100%

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%
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**Note:** Students will earn the same letter grade for co-requisite courses: MA 111-010 and A&S 121-001/002. For details about MA 111-010, please refer to the MA 111-010 syllabus.

### 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, weekly quizzes, and actively participating in the lesson. You will often be allowed (and encouraged) to work in groups during our class meetings.

This class is very interactive. Therefore, attendance is mandatory. The list of excused absences includes illness, death of a family member, any trips organized by the university, and religious holidays. Excused absences must be reported as soon as possible, within a week at the latest. Appropriate notification of absences due to university-related trips is required prior to the absence. *Senate Rule 5.2.4.2.*

To report an absence, email me (your name, section, date, reason) at the email address provided above within one business day of the absence. You are also expected to furnish proof demonstrating the cause compelling you to miss class at the next class meeting for which you are present.

Unexcused absences include missing class entirely without an excuse, showing up more than 5 minutes late or leaving early without an excuse, and neglecting to stay on task. If there are special circumstances that will require you to be late to class or must leave early on a regular basis, please contact me as soon as possible.

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused) per University policy.

Note: There is a procedure for withdrawing from a class. You have not withdrawn if you simply quit attending.

Math is not a spectator sport!

#### **Project (assigned in MA 111-010):**

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. You will be required to submit a copy of your project on Canvas.

#### **Homework:**

This portion of your grade will be earned by completing both in-class worksheets handed out during A&S 121 workshops and individual online assignments outside of class. These assignments will be assigned on a weekly basis and will be online at: <https://webwork111.as.uky.edu/webwork2/MA111-F17-Green/> ← There will also be a link on CANVAS. WeBWork is free to students. Your login is your link blue ID and your password is initially your student number WITHOUT THE LEADING 9. Homework deadlines will be announced in class and on CANVAS.

These problems offer valuable additional practice on the course topics. Please make sure to set aside an adequate amount of time to work on these problems. I will not be expected to respond to homework questions on the evening of the due date. If you need an extension, please submit a request via the WeBWork system.

#### **Mini-Exams (during MA 111-010 class):**

We will have a mini-exam midway through each of the four topics we cover. They are designed 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, then cover new material for the rest of the day. At the end of the semester, your grade is calculated by your HIGHEST THREE mini-exam scores.

#### **Exams (during MA 111-010 class):**

We will have four exams throughout the semester, one for each of the topics we cover. The exams will be DURING CLASS. The final exam is the fourth topic exam and is NOT cumulative. At the end of the semester, your grade is calculated by your HIGHEST THREE exam scores.

### Important Semester Dates:

- Wednesday, August 23: First day of classes
- Tuesday, August 29: Last day to add a class
- Monday, September 4: Labor Day (ACADEMIC HOLIDAY – NO CLASSES)
- Wednesday, September 13: Last day to drop a class without receiving a grade
- Monday, October 16: Midterm of 2017 Fall semester
- Friday, November 11: Last day to withdraw from a class
- Wed – Fri, November 22-25: Thanksgiving Break (NO CLASSES)
- Friday, December 8: Last Day of Classes
- Mon – Fri, December 11-15: Final Examinations
- Friday, December 15: End of 2017 Fall semester

### Course Help:

If you find that you need help in the course, THEN YOU SHOULD SEE ME AS SOON AS POSSIBLE!!! Email, call or stop by my office hours. If the posted office hours do not work with your schedule, please ask about an appointment. I attempt to answer all emails within 24 hours. Please do not expect a response between 2pm and 8pm.

Remember, you earn your grade for this class; I do not GIVE out any grades. Therefore, I expect everyone to try and do his or her best. You are responsible for your own experience in this class and university. Make it a great one!

Free tutoring can be found in the Mathskeller, CB 063, M-F, 9-5pm. <http://www.mathskeller.com>

### Rules and Regulations

**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 written 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/device 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 in 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. You can also refer to the website <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty.

**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 Accommodations from the Disability Resource Center (Suite 407, Multidisciplinary Science Building, 859-257-2754, [dtbeac1@uky.edu](mailto:dtbeac1@uky.edu)) for coordination of campus disability services available to students with disabilities. Make sure you know how to find Testing Schedule on the DRC website, <http://www.uky.edu/DisabilityResourceCenter/>. There is a link at the bottom of the homepage: View the Current Examination Schedule. This is your responsibility.

**Course Policy:** Any questions about grading must be submitted within one week of the assignment being returned in class. I reserve the right to make changes to this syllabus and will make an announcement of any change in class.

**Classroom Expectations:**

- I expect that you will attend and participate for the ENTIRE class.
- I expect that you will be respectful of yourself and others.
- Please do not eat your meals during class. Any drinks need to be in a container with a lid/cap.
- Please SILENCE YOUR CELL PHONES. They are NOT CALCULATORS.
- I expect that you will ONLY WORK ON OUR CLASS MATERIAL during our class time. No other class work, no surfing internet/checking social media sites, no puzzles, etc. during class. If you are working on non-class material, you will be asked to leave class and receive an unexcused absence.
- The university, college and department have 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 will be asked to leave the class, with all subsequent penalties applied to their grade.

**There are certain things that are essential for success in this course (and any other math course.):**

1. Attend class every day. Your instructor attempts to find a way to present and illustrated that material to make it understandable. You will have the opportunity to ask questions about points that are not clear and to hear responses to questions raised by other students.
2. Do the work. You should not expect to pass this course without understanding and solving completely and accurately many problems. It is no more possible to pass this course with a vague understanding of the material than it is to pass a driving test without ever having previously driven an automobile.
3. Don't get behind. If you find you do not understand a concept, make an attempt to immediately clarify it. Mathematics builds on previously learned material and gaps in understanding soon get out of hand.
4. There are two steps in solving problems. First, figure out how to do the problem. This may require lots of scratch paper and time. The next step, is to write the solution up in a logical way that could be understood by a friend with the appropriate background.
5. Stay organized. Keep a calendar or planner with all the due dates of homework, quizzes, exams, etc. This is a good idea to implement with all of your classes.