Math 106-020 Fall '18 Syllabus   **Instructor:** Karen Crossin   Office: Exploratory 4221

Hybrid/Flipped class – What is that???? This class is designed as a Hybrid class, which means that half of the time you spend in the classroom is being replaced by online work or material. Having lecture outside class and doing problems in class is referred to as the flipped classroom pedagogical model. You will have support after class through the MyMathLab portal, but also through our Blackboard discussion board and there are many lecture videos and videos of worked problems available on blackboard that were made by Math 106 instructors here at Mason.

Learning Assistant! This Spring, we are blessed with a Learning Assistant who will hold office hours and review sessions. Marian took this class with me last year and she intends to be a teacher when she is done being a student. Sometimes students find other students more approachable than professors. Marian will moderate the discussions on the discussion board, and is much more likely to respond to late night questions than I am! **She does not have any authority over grades or anything like that, so please only ask her content questions.**

EMAIL: kcrossin@gmu.edu - When emailing me, put MATH 106 followed by **your** first & last name in the subject line. As a general rule you should also provide something meaningful in the subject line. This general rule should be used with ALL emails you send – many emails need a little more than a clear subject line to get the entire point across. I do not open or respond to emails without this information. **Most** math questions are not good to ask over email. Math questions should be asked in the discussion board. I reserve email in this course for questions about grades, or private discussions (not relevant to everyone in the course). Anything else, post to the discussion board. I answer emails once a day (Monday – Friday).

Office hours: Monday and Wednesday 7:30 am- 8:30 am in Peterson or Merten Hall, TBA in the second week of class. In person and online by appointment. Marian will also have office hours TBA.

Text: MyLab Math with Pearson eText -- Instant Access -- for Mathematical Ideas with Integrated Review by Miller & Heeren & Hornsby & He© 2016 | ISBN-13: 9781323919385
The textbook bundled with a MyMathLab access code can be purchased in the campus bookstore. Alternatively, the ebook and MyMathLab access code can also be purchased online – Just click on the tab on blackboard that says MyMathLabHomework and follow the prompts.

Calculators: You will be required to have a calculator for the course with an **e^x** function and factorial function (**!**). We are recommending the TI-83/84 or TI-30II.

Course Description: This course meets the quantitative reasoning requirement, one of the Foundation requirements of the University General Education program. The goal of the Foundation requirement is to help ensure that students are equipped with the tools and techniques necessary to succeed in college and throughout their lives and careers.

The learning objectives for this requirement are:

1. Students are able to interpret quantitative information (i.e., formulas, graphs, tables, models, and schematics) and draw inferences from them.

2. Given a quantitative problem, students are able to formulate the problem quantitatively and use appropriate arithmetical, algebraic, and/or statistical methods to solve the problem.

3. Students are able to evaluate logical arguments using quantitative reasoning.

4. Students are able to communicate and present quantitative results effectively.

The course will introduce the following material: Inductive and Deductive Reasoning, Sets, Logic, Counting, Probability, Statistics and Finance.

Tests: Each of the In Person Unit Tests will be proctored in Exploratory Hall 4107, likely between 10 AM and 7 PM or <u>at a proctoring center I have approved two weeks prior to each test.</u> Off-campus test proctoring is only permitted for students who live more than 50 miles away from the GMU Fairfax.

- Exam 1 Online Only (MyMathLab): due by 11:59 pm Friday, September 7th
- Exam 2 **In Person**: Monday October 1st (There will also be a MML portion of this test due by 11:59 pm Friday, October 5th)
- Exam 3 Online Only (MyMathLab): Due by 11:59 pm Friday, October 26th
- Exam 4 **In Person**: Monday November 12th (There will also be a MML portion of this test due by 11:59 pm Friday, November 16th)
- **Final Exam <u>In Person</u>: TBA Dec 12th is most likely date**

Tests must be taken on these dates. NO make-up tests will be given. You must present a photo ID for each in person test.

Grading: Your grade for the course will be calculated based on:
- Syllabus quiz (50 points due day 1)
- Calendar Assignments (50 points)
- Discussion Board and Written/Collaborative Assignments (200 points)
- MyMathLab Tests (50 points each, totaling 200 points)
- Online (MyMathLab) homework (100 points)
- In person Tests (100 points each, totaling 200 points)
- Final Exam (In person) (200 points)

Your total number of points will be divided by 10.

The grading scale will be: A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%; F: below 60% .

  + or – may be attached to the grade for the upper or lower 2 points in each range

Lectures: Several seasoned Math 106 instructors from GMU have recorded lecture videos which are available under the course content tab in Blackboard. Watch these videos and take notes as if you were in class. If you do not watch them, you are essentially skipping class. There are also videos on MyMathLab which cover the entire unit from the text, not just the parts we are focusing on. Some students in the past have watched both sets of videos. You are an adult, so it is up to you to decide what you would like to do. There are also worksheets with worked solution videos to take the place of the part of class where you would ask homework questions. Please take advantage of the resources available to you!

Online Homework: Your homework grade in this course comes entirely from the MyMathLab on line homework system. Registration information for that system is partially explained in the welcome video and there are directions posted below the syllabus on Blackboard.

Discussion Boards: You are required to complete 5 in-depth discussion board posts during the course of the semester. Please use the discussion board for ALL content and logistical questions about this course. Make sure you post under the correct forum and either reply to an existing thread or create a new one with a meaningful subject line indicating the unit/ chapter/ section or topic you are discussing. Your post can show your **work**, ask a question or answer a question. I strongly encourage the use of drawings, colors, tables and descriptions of your thought process.   Some students in the past have shared links to other helpful sites or screen shots of their work on MyMathLab. Students who regularly participate in the discussion board tend to earn the highest grades –These students frequently submit incorrect work to the discussion board, and get the DISCUSSION started which is where learning frequently happens. Posting "Me Too" does not count. A summary of your discussions will be due Dec. 7th

MyMathLab is a powerful online, homework, tutorial and assessment system that accompanies your new textbook. Students can take assessments, and receive personalized study plans based on their results. The study plan diagnoses weaknesses and links students to tutorial exercises for objectives they need to study. In many cases students can also access video clips, PowerPoint presentations, and other animations for each section and from selected exercises.

MyMathLab is NOT a program operated by GMU. If you are experiencing technical difficulties using the program, then you can email or "chat" with Customer Support directly through the Pearson Education Customer Service website. Go to http://247pearsoned.custhelp.com for more information. Help is available 24 hours a day, seven days a week. You could also call the Pearson Customer Service and **Technical Support number at 800-677-6337**.

Warning: When doing the MML homework, your goal should be to be able to complete it without the use of the "Help Me Solve This" or "View an Example" helps. If you are not able to do this, you do not know the material well enough to be successful on Exams or Quizzes.

Disability statement: If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Resources at 703.993.2474. All academic accommodations must be arranged through that office.

 Tutoring Center: The Math Tutoring Center is located in the Johnson Center Room 344. Help is available on a walk-in basis. For hours of operation see *http://math.gmu.edu/tutor-center.php*

 University Honor Code: You are expected to follow the GMU Honor Code https://oai.gmu.edu/mason-honor-code/

Below is the schedule for the course. Bb = Blackboard, MML = MyMathLab

Class meeting Mondays	Week Beginning on Wednesday before class meeting	Week	Homework due at 11:59 PM Friday	Topics	Sections Covered
Aug. 27	Aug. 22	1	August 31	Decimals, Percent and Scientific Notation, Interest	6.5, 7.3, 7.5, & 13.1
None – Labor Day	Aug. 29	2	September 7	Borrowing Money	13.2 & 13.4
	Extra Office Hours Thu. Sept. 6		MML Test due Friday Sept. 7	%, Scientific Notation and Money	Test on GREEN Unit
Sept. 10	Sept. 5	3	Sept. 14	Problem Solving, Sets, and Set Theory and Surveys	1.1, 1.2, 2.1, 2.2, 2.3, & 2.4
Sept. 17	Sept. 12	4	Sept. 21	Intro to Logic	3.1, 3.2, & 3.3
Sept. 24	Sept. 19	5	Sept. 28	More Logic	3.3, 3.4, & 3.6
Oct. 1 Paper Test	Sept. 26	6	MML Test due Friday Oct. 5 11:59pm	Sets and Logic	Test on Orange unit Paper Test This week
None	Oct. 3	7 ☺	Columbus Day	Relax or work ahead	Start Counting! Ch. 10
Oct. 15	Oct. 3	8	Oct. 19	Counting Methods, Counting and Probability	10.1-3, 10.5 & 11.1
Oct. 22	Oct. 17	9	Oct. 26	Probability	11.1 – 3 & 11.5
			MML Test due Friday Oct. 26		Test on Purple Unit
Oct. 29	Oct. 24	10	Nov. 2	Introductory Statistics	12.1, 12.2, & 12.3
Nov. 5	Oct. 31	11	Nov. 9	Statistics & Normal Distribution	12.3, 12.4, & 12.5
Nov. 12 Paper Test	Nov. 7	12	MML Test due Nov. 16	Statistics	Test on Blue unit
			Thanksgiving	Relax or Review	
Nov. 26		13		Review for Final	
Dec. 3		14		Review for Final	
Wed Dec 12			Final Exam TBA	Date is most likely	This will be updated by Oct 1.