Math 106 DL Syllabus Fall 2017

Instructor: Karen Crossin **Office: Exploratory Hall room 4221**
Office Hours: Monday 8:30-9:30 AM, Tuesday 9:30-11 AM and on line by appointment.
Email: kcrossin@gmu.edu

Learning assistants: Ann Stephens and Allison Chung are undergraduate students who took this class before and are planning to be teachers. They will both have some additional office hours, facilitate conversations on the discussion board and they will run oral reviews prior to each unit test. We are very lucky to have this extra support.

EMAIL - When emailing me, put MATH 106 DL 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.

Text: Mathematical Ideas, by Miller, Hereen and Hornsby, *Custom Edition*, Pearson, 2012 (ISBN: 978-1-256-71962-5) or Mathematical Ideas full 12th edition (ISBN-13: 978-0321693815 or ISBN-10: 0321693817). The custom book is just the parts of the full text that we actually use.

Alternatively, the full 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 $\mathbf{e^x}$ function and factorial function (**!**). We are recommending the TI-83/84 or TI-30II. There have been students who were just fine with a $5 Scientific Calculator from Target/ Walmart.

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.

Test Dates: All tests will be given in the Mathematics Test Proctoring Center, located in Exploratory Hall 4107. Students will be given the opportunity to sign up for testing times during the day.

- Test 1: Wednesday, Sept. 27
- Test 2: Wednesday, Oct. 25
- Test 3: Wednesday, Nov. 29
- Final Exam: Wednesday December 13 – If you have two other exams scheduled this day, please email me by Oct. 1 to discuss other options. See the final exam schedule @ http://registrar.gmu.edu/calendars/fall-2017/final-exams/
- Tests must be taken on these dates. NO make-up tests will be given. You must present a photo ID for each test.

Grading: Your grade for the course will be calculated based on:

- Semester and weekly schedules submitted on time (20 points)
- Three exams (100 points each for a total of 300 points)
- Written and online homework (50 points each for a total of 100 points)
- Participation in discussion boards (30 +/- points)
- Final Exam (150 points).

Your total number of points will be divided by 6.
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 *approximately* the upper or lower 2 points.

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!

Homework: Every week you will need to complete online homework and many weeks you will need to submit hand written homework as a **SINGLE PDF** in blackboard. I strongly encourage completing the on line MyMathLab homework first, then working in study groups on the paper and pencil homework as it makes the homework go more smoothly and it is more fun. Homework is due each Monday by 1 PM. If weekends are the best time for you to do homework, then get it started the weekend BEFORE it is due! Each unit is available for at least one full week and two weekends so YOU need to be an adult and schedule your time carefully. Emailed homework will **not** be accepted.

Discussion Boards: You are required to complete 5 in depth discussion board posts during the course of the semester worth 10 points each to earn up to 50 points. 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 DISUCSSION started which is where

learning frequently happens. Posting answers without work will not earn you credit. Posting "Me too" does not count. Posting offensive language or rants may lead to point deductions. Keep track of your posts (whether you posted a question or answer, along with the date and section from the book or test review). You will turn this in at the final.

Number/Date of Post	Section and Question	Answer
1		
2		
3		
Extras? Describe here -		

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 http://oai.gmu.edu/the-mason-honor-code/

Below is the schedule for the course.

Week Beginning on Friday	**Week**	**Homework due at 1:00 PM Mondays**	**Topics**	**Sections Covered**
Aug 26	1	Sept 5 – Due to Labor Day this week's due date is on a Tuesday	Problem Solving and Sets	1.1 , 1.2 & 2.1
Sept 1	2	Sept 11	Set Theory	2.2, 2.3 &2.4
Sept 8	3	Sept 18	Intro to Logic	3.1, 3.2 & 3.3
Sept 15	4	Sept 25	More Logic	3.3, 3.4 & 3.6
		Test on blue unit	Wednesday Sept 27	
Sept 22	5	Oct 2	Decimals, Percent and Scientific Notation	6.5 & 7.5
Sept 29	6	Oct 10 Tuesday due to Columbus Day	Counting Methods	10.1, 10.2 & 10.3
Oct 6	7	Oct 16	Counting and Probability	10.5 & 11.1
Oct 13	8	Oct 23	Probability	11.2,&3,11.5
		Test on orange unit	Wednesday Oct 25	
Oct 20	9	Oct 30	Introductory Statistics	12.1, 12.2 & 12.3
Oct 27	10	Nov 6	Statistics	12.3 & 12.4
Nov 3	11	Nov 13	Normal distribution	12.5
Nov 10	12	Nov 20	Interest	13.1
		Test on Green Unit	Wednesday Nov 29	
Nov 17	13	Dec 4	Borrowing Money	13.2 & 13.4
		Final exam	**Wednesday**	**December 13**