# Syllabus Math 106, Quantitative Reasoning <br> Fall 2019 GMU 

## Instructor: Liz Dinkelman

Office Hours and location: Tuesday, Thursday 2:00 pm - 2:45 pm Exploratory Hall 4309
Email: edinkelm@gmu.edu (please put GMUMath106 somewhere in the subject line)
Text: Mathematical Ideas, by Miller, Hereen and Hornsby, Custom Edition, Pearson, 2012 (ISBN: 978-1-256-71962-5), but you do not need to buy the text since it is embedded in MyMathLab.

Calculators: You will need a Scientific Calculator for this course for example, a TI-30.
The MyMathLab access code can be purchased in the campus bookstore. Alternatively, the MyMathLab access code which will provide access to a digital version of the text and the online tools can also be purchased online http://www.mymathlab.com

Homework: We will be using MyMathLab for online homework. Information about registering and using the MyMathLab website is available on the Blackboard site.
MyMathab Course ID code: dinkelman63384
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.

## Grading:

Four Tests 80\%
Online homework 16\%
Project 4\% (Details of Project to be announced)

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.

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.

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/

Tentative schedule

| Week | Topic | Sections Covered |
| :---: | :---: | :---: |
| $\begin{aligned} & 8 / 27 \\ & 8 / 29 \end{aligned}$ | Inductive/Deductive Reasoning, Problem Solving and Sets | 1.1, 2.1, 2.2 |
| $\begin{aligned} & \hline 9 / 3 \\ & 9 / 5 \end{aligned}$ | Set Theory | 2.3, 2.4, 3.1, 3.2 |
| $\begin{aligned} & 9 / 10 \\ & 9 / 12 \end{aligned}$ | Logic | 3.3, 3.4, 3.6 |
| $\begin{aligned} & 9 / 17 \\ & 9 / 19 \end{aligned}$ | Logic TEST 1 (9/19) | Catch-up |
| $\begin{aligned} & 9 / 24 \\ & 9 / 26 \end{aligned}$ | Decimals, Percent and Beginning Counting | $6.5,10.1,10.2$ |
| $\begin{aligned} & 10 / 1 \\ & 10 / 3 \end{aligned}$ | Counting and Beginning Probability | 10.3, 10.5 |
| $\begin{aligned} & 10 / 8 \\ & 10 / 10 \end{aligned}$ | Probability | 11.1, 11.2, 11.3 |
| 10/15 no class $10 / 17$ | Probability $\quad$ TEST 2 (10/17) |  |
| $\begin{aligned} & 10 / 22 \\ & 10 / 24 \end{aligned}$ | Statistics | 12.1, 12.2, 12.3 |
| $\begin{aligned} & 10 / 29 \\ & 10 / 31 \end{aligned}$ | Statistics | 12.4, 12.5 |
| $\begin{aligned} & 11 / 5 \\ & 11 / 7 \end{aligned}$ | Statistics $\quad$ TEST 3 (11/7) | Catch-up |
| $\begin{aligned} & 11 / 12 \\ & 11 / 14 \end{aligned}$ | Algebra Review | 7.1, $7.2,13.1$ |
| $\begin{aligned} & 11 / 19 \\ & 11 / 21 \end{aligned}$ | Financial Math | 13.2, 13.3 |
| $\begin{aligned} & 11 / 26 \\ & \text { 11/28 Thanksg } \end{aligned}$ | Financial Math | Catch-up |
| $\begin{aligned} & 12 / 3 \\ & 12 / 5 \end{aligned}$ |  | $13.4$ <br> Catch-up |
|  | $\begin{array}{r} \text { FINAL Test \#4 - Thursday } 12 / 17 \\ 1: 30 \mathrm{pm}-2: 30 \mathrm{pm} \end{array}$ |  |

