

**George Mason University**  
**MATH-106-010 – Quantitative Reasoning (3 credits)**  
**Spring 2018**

**Instructor:** Susan Calderon

**Email:** [scalder1@gmu.edu](mailto:scalder1@gmu.edu)  
When emailing me, **the subject line of the email must be:**  
MATH 106-010 followed by **your** first & last name.  
I check for messages at least once a day, usually not in the nighttime

**Instructor Policies:**

1. Bring a notebook and pen/pencil to class to take notes.
2. No late work is accepted.
3. Computers and phones must be turned **OFF** upon entering class.

**Office Hours & Location** Exploratory Hall, 4<sup>th</sup> floor, across hall from Math Dept.  
I am available on Tue/ Thurs., 11-12 pm, or by appointment  
  
(703) 993-1000  
Official emergency closing info

**Class Meeting Time and Location:** Robinson B 202  
T/Th 9:00-10:15 AM

**Required Materials:**

1. *Mathematical Ideas: Math 106 Quantitative Reasoning* by Miller, Hereen and Hornsby 13<sup>th</sup> edition
2. Textbook with Access Code for MyMathLab (included with the purchase of a new book) ( can be purchased in the campus bookstore.) OR Just 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>).
3. Any scientific calculator. My suggested model is the Texas Instruments TI-30X IIS (easiest to use for financial calculations)

**Contacts:**

Name		Cell

**During this class, I want you to:**

1. Develop and refine logical reasoning skills to reach conclusions that can be rigorously defended.
2. Read, interpret, and absorb technical ideas.
3. Write clearly and effectively to convince someone of the logic behind your conclusions.
4. Engage and learn in a respectful classroom environment.
5. Recognize how math is applicable to your life and how a working knowledge of mathematics gives you the privilege of engaging with the world in a meaningful way.

**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 you are equipped with the tools and techniques necessary to succeed in college and throughout your lives and careers. After taking this class:

1. You will be able to **interpret quantitative information (i.e., formulas, graphs, tables, models, and schematics) and draw inferences from them**
2. Given a quantitative problem, you will be able to **formulate the problem quantitatively and use appropriate arithmetical, algebraic, and/or statistical methods to solve the problem.**
3. You will be able to **evaluate logical arguments using quantitative reasoning.**
4. You will be able to **communicate and present quantitative results** effectively.

**Attendance:**

You will pass this class if, you attend regularly, stay focused on the class and, do the assigned work.

**If you miss class.** Regardless of whether you are present or absent from class, **you** are responsible for everything that happens in class (assignments, homework, quizzes, etc). **Find out what you missed from one of your contacts. No late work** is accepted in this course.

**Homework:**

**Working homework is most important part of the learning process** in this course. Please be sure that you leave yourself enough time to do the homework

Once a section is completed in class, the homework assignment that corresponds to it is due the next class regardless of the due date listed in MML. Waiting until the last minute to complete HW is not a good idea. The nice thing about MML homework is that you can do each problem over and over until the due date, in an attempt to improve your score. This repetition is encouraged because with practice you will understand the math!

*Note: 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” aids. If you are not able to do this, you won’t know the material well enough to be successful on Exams.*

**NOTE:** At times you may run into internet connectivity problems or other technical difficulties. For these reasons you should start HW ahead of time so that you have time to solve these issues. You are responsible for planning wisely!

My



Math Lab:

**My Math Lab is a powerful online, homework, tutorial and assessment system** that accompanies your 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.

**To sign up:**

1. Login to [www.pearsonmylab.com](http://www.pearsonmylab.com) (or mymathlab.com)
2. Click on the **register** link on the right hand side under “**Students.**” The website will then walk you through the steps
3. You will need
  - a. A valid GMU email
  - b. A NEW **student access code**, packaged with your new textbook **or** available online with a credit card
  - c. Our course id: calderon79978

(You can get 14 days of temporary access (look for the tiny blue link at bottom of page)

**You are required to get regular access going by day 15!**

*MyMathLab* is NOT a program operated by GMU.

MyMathLab Technical Support: <http://247pearsoned.custhelp.com>  
(available 24 hours a day)

Pearson Customer Service and Technical Support: 800-677-6337.

DO NOT CALL THE GMU HELP DESK!

**Pop-Quizzes:**

There may be a Quiz given at the beginning of class. So, be on time to take it.

**Tests & Final Exam:**

There are 3 exams in this course, and one comprehensive final exam. There are no make-up exams, but your lowest exam grade will be replaced by your percentage on the final exam (assuming that it is a lower grade than that of your final.) This percentage only replaces one exam. If you miss more than one exam, for any reason, then the second exam will be counted as a zero.

The final exam is Thursday May 10 from 7:30 – 10:15 am. There are no make-ups for the Final Exam.

**Extra Credit:**

There is no extra credit in this course.

**Requirements and Grading Scale**

3 Unit Tests	48%
Group project	16%
MML Homework/Quizzes	16%
Final Exam	20%

100-90	A
89-80	B
79-70	C
69-60	D
59-0	F

**Important Dates:** Jan 29: Last day to drop with no tuition liability.  
Jan.29: Last day to add classes.  
Feb23: Last day to drop with no academic liability.

**Tutoring:** 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/tutorcenter.htm>

My Math Lab is the best resource available for this class. In MML there are lecture videos, and step-by-step instructions on how to complete homework problems.

**Academic dishonesty and the GMU Honor Code:** You are expected to follow the GMU Honor Code <http://academicintegrity.gmu.edu/honorcode/>

No collaboration is allowed on quizzes or tests. Any indication that you have worked together, used someone else's ideas, copied, or allowed fellow student to copy your work is a violation of the GMU Honor Code.

**Some** of the behaviors that will be considered cheating are:

- Communicating with another person during an assessment
- Copying material from another person from any assignment being graded
- Allowing another person to copy from any assignment being graded
- Use of unauthorized assistance on any assignment being graded
- Use of unauthorized notes or books during an assessment
- Providing or receiving a copy of a quiz or exam used in the course
- Use of a cell phone during an assessment

**Learning Differences & Special Needs**

If you have a learning or physical difference that may affect your academic work, please see me and contact the Office of Disability Services (ODS) at 993-2474, <http://ods.gmu.edu> All academic accommodations must be arranged through the ODS

**MATH-106-010 – Quantitative Reasoning (3 credits)****VERY IMPORTANT:**

Course dates are tentative and subject to change. Make sure to keep up with what we cover each class as we may need to adjust the schedule

<b>Class</b>	<b>Topic</b>
1/23- 1/25	Class Introduction 1.1 Mathematical Reasoning / Chapter 2 Sets: section 1
1/30 – 2/1	Chapter 2 Sets 2.2/ 2.3
2/6- 2/8	2.4/ Chapter 3 Logic: section 1
2/13 - 2/15	Chapter 3 Logic: 3.2/ 3.3-4
2/20- 2/22	3.6/ Test 1 Review
<b>2/27- 3/1</b>	<b>Test 1/ Chapter 10 Counting Methods: 10.1</b>
3/6- 3/8	10.2/10.3
March 13/15	Spring Break ☺
3/20-3/22	10.5/ Chapter 11 Probability: section 1
3/27-3/29	11.2/ 11.3
4/3- <b>4/5</b>	Test 2 review (review decimals ?)/ <b>Test 2</b>
4/10- 4/12	Chapter 12 Statistics: section 1 and discuss project / 12.2
4/17- 4/19	12.3/ 12.4
4/24 -4/26	12.5/ Review for Test 3 and project due
<b>5/1- 5/3</b>	<b>Test 3, Last class: Chapter 13 Financial Math 13.1, review equation solving, discuss final exam</b>
05/10	<b>Cumulative Final Exam</b> <b>7:30am – 10:00 pm</b>