George Mason University
MATH-106-004 – Quantitative Reasoning (3 credits)
Fall 2019

Instructor:	**Susan Calderon**
Email:	**scalder1@gmu.edu** When emailing me, please include your first and last name Along with MATH 106-006 **in the subject line** I do my best to check e-mail regularly but not after 5 pm
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, 4th floor, adjunct office (across from 4400) I am available on M/F 9:00-10:00am by appointment Official emergency closing info: (703) 993-1000 or GMU website
Class Meeting Time and Location:	Peterson Hall room 1105 M/W 12:00-1:15
Required Materials:	1. You need to buy an access code for the online HW program at the GMU bookstore or on www.mymathlab.com The access code also gives you access to an electronic version of the text 2. You can use the electronic copy or buy a hard copy of the text: Mathematical Ideas:Math 106 Quantitative Reasoning by Miller, Hereen and Hornsby 14th edition The textbook bundled with a MyMathLab access code can be purchased in the campus bookstore NOTE: you do need an access code either bought with new text or on the mymathlab website 3. Any scientific calculator.

Contacts:

Name		Cell

Course Description: This course meets the quantitative reasoning requirement, one of the Foundation requirements of the University General Education program.
After completing this course:

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 pro**blem.
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, participate in class and, do the assigned work.

If you miss class, find out what you missed from a classmate. You are responsible for getting the notes and any other important info. (Assignments, homework, quizzes, etc). No late work is accepted in this course.

Homework:

Working homework is the most important part of the learning process in this course. Please be sure you leave plenty of time for doing the homework.

Once a section is completed in class, the homework assignment that corresponds to it is due the next class, unless I announce otherwise. **Late work will NOT be accepted** so waiting until the last minute to complete it 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 it will help you to understand and apply the concepts you are taught.

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" helps. If you are not able to do this, you do not know the material well enough to be successful on Exams or Quizzes.

IMPORTANT:

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!

MyMathLab:

MyMathLab is a very helpful 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 (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: calderon40551

You can get 14 days of free temporary access (look for the tiny blue link at bottom of page)
You are required to get regular access by day 15

(MyMathLab is NOT a program operated by GMU, so the GMU help desk can't help you with it)

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

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

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 final exam grade is higher) 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 Monday December 16 from 10:30 – 1:15 pm. 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%

Cumulative MML Homework/Quizzes grade	16%
Final Exam	20%

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

Withdraw & Audit

Sept. 9: Last day to drop with no tuition liability.
Sept. 3: Last day to add classes.
Oct.01 : last day to withdraw

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*

MyMathLab 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-106-004 – 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

Class	Topic
8/26-8/28	Class Introduction/Syllabus/Grade Policy Discussion 1.1 Solving Problems by Inductive Reasoning / 2.1 Set Theory
9/4-9/9	2.2 Venn Diagrams / 2.3 Set Operations
9/11-9/16	2.4 Cardinal Numbers Surveys / Chapter 3 Logic; 3.1 Statements and quantifiers
9/18-9/23	3.2 Truth Tables and equivalent statements / 3.3 and 3.4 conditional and related statements
9/25-9/30	3.6 Arguments and Truth Tables, Review
10/02-10/07	**Exam 1 on 10/03 / Chapter 10:**10.1 Counting by listing
NOTE:	**6.5 Decimals and Percent (review on your own as needed, bring in questions)/ Practice section available on MML (not included in HW grade)**
10/09-10/15	10.2 Fundamental Counting Principle/10.3 Perms and combs
10/16-10/21	10.5 Counting with "not" and "or"/11.1 Intro probability
10/23-10/28	11.2 probability with "not" and "or"/11.3 Conditional Probability
10/30-11/04	Chapter 11 wrap up and review for Exam 2/ Exam 2

11/6-11/11	Chapter 12 Statistics 12.1, discuss project/ 12.2: Measures of Centrality
11/13-11/18	12.3 Measures of dispersion/12:4 Measures of Dispersion
11/20-11/25	12.5: the normal distribution / Pass in Project, Chapter 13.1,review for exam 3
12/02-12-04	Exam 3 on chapter 12, Discuss Final Exam
12/7	Last day of classes (Saturday)
12/16	**Final Exam 10:30-1:15, in our classroom, no make-up**