Syllabus Math 106, Quantitative Reasoning
Three credits, sction 82280. Fall 2018
Innovation Hall, room #133
TR 12:00pm – 1:15pm

Instructor: Shams Alyusof
Office Hours and location: Tuesday 10:50am-11:50am and 1:25pm-2:25pm. Exploratory Hall, room # 4309**. Email:** salyusof@gmu.edu
Text: Mathematical Ideas, by Miller, Hereen and Hornsby, Custom Edition or 13th edition Pearson.

The textbook can be purchased in the campus bookstore.

Calculators: You will need a Scientific Calculator for the course.

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

Grading:

- **Two midterm exams** (15 points each for a total of 30 points)
- **Written homework** (4 points each for a total of 40 points). Homework will be assigned on Blackboard on Fridays, and it will be due the following Tuesday at noon.
- **Participation** (10 points). There will be some pop quizzes. These are part of your participation credit. Also, students will have the opportunity to present their solutions to homework problems. Each student will be required to present in front of the class at least once.
- **Final Exam** (20 points).

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.

Below is a tentative schedule for this course. There will be weekly progress tracking on Blackboard.

Week	Topic	Sections Covered
8/28 8/30	Inductive/Deductive Reasoning, Problem Solving and Sets	1.1, 2.1,2.2
9/4 9/6	Set Theory	2.3, 2.4
9/11 9/13	Logic	3.1, 3.2
9/18 9/20	Logic	3.4, 3.6
9/25 9/27	Decimals and Basic Concepts of Algebra	6.5, 7.1
10/2 10/4	Basic Concepts of Algebra + **TEST #1 (10/4)**	7.2
10/9 10/11	Basic Concepts of Algebra	7.3, 7.5
10/16 10/18	Counting	10.1, 102
10/23 10/25	Counting	10.3, 10.5
10/30 11/1	Probability	11.1 , 11.2
11/6 11/8	Probability + **TEST #2 (11/8)**	11.3
11/13 11/15	Probability and Statistics	11.5, 12.1
11/20	Statistics	12.2
11/27 11/29	Statistics	12.3, 12.4
12/4 12/6	Statistics and Financial Math	12.5, 13.1
12/14	**FINAL Exam**– Thursday December 13th 10:30 am – 12:30 pm	