

Syllabus Math 106, Quantitative Reasoning

Instructor: Dr. Fred Ricci

Office Hours and location: MW after class by appointment

Office : 4407 Exploratory Hall

Email: fricci@gmu.edu

Class room: 248 Robinson A

Objectives : The objectives of this course is to enhance the students understanding of the power of quantitative thinking in every day life and the work place. It is expected that we will encourage students to do well and have FUN.

We want to make utilizing the language of Mathematics a good experience that will last the students life time.

We Love Mathematics is our theme !!!

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.

Text: Mathematical Ideas, by Miller, Hereen and Hornsby, *Custom Edition* or 12th edition Pearson, 2012 (ISBN: 978-1-256-71962-5 or) **Calculators:** You will need a Scientific Calculator for the course.

The textbook bundled with a MyMathLab access code can be purchased in the campus bookstore. Alternatively, the ebook and MyMathLab access code which will provide access to a digital version of the text and the on line tools can also be purchased online (<http://www.mymathlab.com>). It is strongly recommended that you purchase the physical text as most students are more successful using a physical book, and we made the custom edition to reduce the total cost to you. The publisher has gone to the 13th edition, but we are staying in the 12th a bit longer to reduce the price for you.

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/>

MyMathLab is a powerful online, homework, tutorial and assessment system that accompanies your new textbook. Students can take assessments. and receive personalized studv plans based on their results. The studv 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

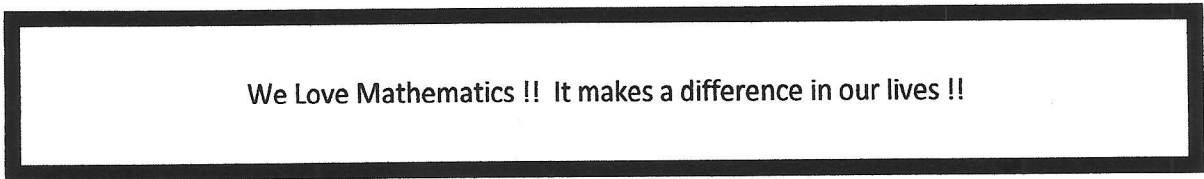
Examinations :

- Two exams (100 points each for a total of 200 points)
- Written and online homework (100 points each for a total of 200 points)
- Participation in discussions and workshops (100 points)
- Final Exam (100 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.

We will expedite our goals in Mathematics by working in groups. We will have group discussions and assignments. Each person is expected to participate enthusiastically in groups.



Homeworks ;

Homework will be assigned every week. It is expected that each student does their own homework and hand in assignment the next class meeting. Practice makes perfect.

Week	Topic	Sections Covered
11	Inductive/Deductive Reasoning, Problem Solving and Sets	1.1, Ch2
12	Set Theory	Ch 2
7	Logic	Ch 3
8	Logic	Ch 3
9	Decimals, Percent and Begin Counting	6.5, Ch 10
10	Counting and Begin Probability	Ch 10, 11
2	Probability	Ch 11
3	Probability Exponents and Scientific Notation	Ch 11
4	Statistics	Ch12
5	Statistics	Ch12
6	Algebra Review and Regression	7.1,2 and Ch12 extension on Regression
1	Financial Math	Chapter 13
13	Student Presentations	Summary of Fun time
14	FINAL EXAM – http://registrar.gmu.edu/calendars/ ,1pm,rm.248 Robimson	Dec.9,2017