GEORGE MASON UNIVERSITY
COURSE SYLLABUS

Instructor: Emmanuel Addo
Phone: (703)-993-1463
Office Location: Exploratory Hall 4311
Office Hours: MW 4:50PM – 5:50PM OR by appointment
Email: eaddo2@gmu.edu
Course: Quantitative Reasoning MATH 106 – 011
Class Time: MW 5:55PM – 7:10PM
Location: Krug Hall 204

Text: *Mathematical Ideas: Math 106 Quantitative Reasoning* by Miller, Hereen and Hornsby (Custom Edition for George Mason University)
Required Materials: 1**.** Scientific calculator with a button for e^x, pen or pencil, and notebook.
2. Access Code for MyMathLab (included with the purchase of a new book) 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 be purchased online (http://www.mymathlab.com).
NOTE: you do need an access code either bought with new text or on the mymathlab website
Material to be Covered: Sections covered are 1.1, 2.1, 2.2, 2.4, 3.1-3.4, 3.6, 6.5, 7.1-7.3, 7.5, 10.1-10.3, 10.5, 11.1-11.3, 11.5, 12.1 -12.4 and 13.1 (***not in that order***). This course satisfies the General Education Requirement in quantitative reasoning.

COURSE DESCRIPTION: Study of logic and reasoning; basic algebra and financial formulas; sets and Venn diagram; probability and statistics. Many problems and examples are drawn from the fields of business, economics, and social science.

COURSE LEARNING OUTCOMES: By the end of the semester, the student should be able to:
1. Know and understand inductive and deductive reasoning
2. Know and understand statements and quantifiers
3. Construct truth tables to determine whether a statement is tautology
4. Determine the validity of an argument
5. Know and understand the basic concept of algebra to solve problems
6. Use simple and compound interest formulas to determine future and present value of an investment
7. Use annuity formulas to determine future and present value of an investment
8. Use set notation and terminology and solve survey problems using Venn diagrams
9. Use the rules of counting and probability to solve related problems
10. Use and understand common statistical terminology
11. Construct and interpret frequency distributions, histograms, pie charts, and box plots.
12. Calculate and interpret the measures of center and spread

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: **addo91306**
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.

A few key points
- ➤ **Courtesy and mutual respect will be shown by all.**
- ➤ Work sessions outside of class between classmates are highly encouraged.
- ➤ Do not hesitate to ask me for suggestions or to inquire about your progress in the class.
- ➤ Absolutely no cheating or plagiarism will be tolerated in this class.
- ➤ Asking questions in class are highly encouraged.
- ➤ All pagers, cell phones and other electronic gadgets must be turned off.
- ➤ Disruptive behaviors (arriving late, excessive talking, etc) will not be tolerated.

	Practice Problems	10%
	Homework	10%
	Quizzes	15%
Grades will be weighted as follows:	Test 1	15%
	Test 2	15%
	Test 3	15%
	Final Exam	20%

Practice Problems: Included in this category are group accountability and written work completed in class. Perfect attendance will enable success in this area.

Homework: Homework assignments will be assigned on weekly basis. These assignments will primarily emphasize skill and drill exercises based on topic discussed in class. The homework will be due on weekly basis for checking.

Quizzes: There will be ten short quizzes on Wednesdays. Problems will be similar to assigned homework problems if not the same. Expect 20 minutes of class time for the quizzes. At the end of the semester, your lowest quiz score will be dropped.

Tests: There will be 3 tests given in class which would be announced well advanced in class. Included on tests will be questions asking you to solve problems, explain processes and write valid conclusions for your results. No Test will be dropped.

Final Exam: The **<u>comprehensive</u>** final exam will be in class on the date and time noted on the university calendar.

Expectations: My expectations are fairly simple and direct. I expect you to participate fully in the class and in your own learning. Collaborative learning in all its forms (group homework, study groups, etc.) is expected. You are not in this alone. I expect you to be in class and to complete all assignments within a given time. <u>All homework assignments are due next class</u>. **There will be <u>no</u> make-up test or exams. In cases of emergency, you may call me <u>before</u> class time and something may be arranged.**

Each problem will be graded as follows with possible of 5 points total when asked to show work.

<u>Points</u>   <u>Work</u>
0   No attempt to do the problem.
1   Restating the problem, drawing a picture...
2   Some correct ideas.
3   Half correct ideas.
4   Mostly correct ideas.
5   Perfection.

The following scale will be used to determine your final grade:

A 93-100	C+ 75-79
A- 90-92	C 70-74
B+ 87-89	C- 65-69
B 84-86	D 55-64
B- 80-83	F <55

The Joys of Homework
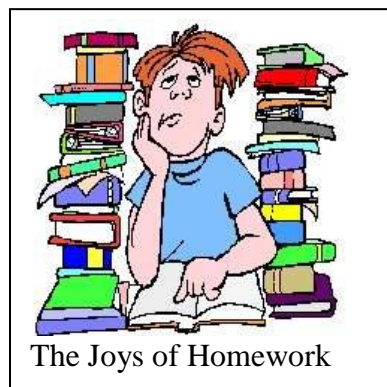
Incomplete: There will be **no** incomplete in this class unless it is under extreme circumstances which can best be discussed with the student's academic adviser and any other party involve.

Honor Code: Students are expected to follow the rules and guidelines of the University Honor Code. Failure to do so may results in appropriate disciplinary actions. See academicintegrity.gmu.edu

Special Needs: If you need course adaptations or special accommodations because of a disability, if you have emergency medical information, or if you have special accommodations that need to be shared with me in the event that the building needs to be evacuated, please as soon as possible for the necessary accommodation to be arranged.