

George Mason University

MATH 106 – 003 Fall 2021

Quantitative Reasoning (CRN 70676)

Classroom PLANET 224

Time MW 5:55 PM – 7:10 PM

Instructor: Kumnit Nong
Knong@gmu.edu

Office EXPL 4309 Email
Phone: 202 – 743 – 0066 (Text message preferred)

Office Hours: Monday 3:30 – 4:30 (via zoom)

Appt Hours: Wednesday 3:30 – 4:30 (via zoom)

All office hours, please send me a text message, I will provide zoom meeting ID.

Textbook: Viewing Life Mathematically (Custom for GMU) by Denley. We will be using the online learning management system called Hawkes for this class and digital version of Textbook is available on Hawkes for free. Therefore, you do not need to buy hard copy of textbook unless you prefer a hard copy.

Calculators: Scientific Calculator (**NO Graphing Calculator**)

HAWKES ONLINE ACCESS CODE Required

Course Contents: CH 1.1 1.3, 2.1 – 2.4, 3.1 – 3.3, 4.1-4.1, 7.1-7.5 8.1-8.5

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.

Grading Policy:

- Online Hawk Learning Homework and Homework assigned on Blackboard (25%)
- Two examinations (15% and 30%). Exam date will be announced in class at least two weeks in advance, also listed on Blackboard as well.
- Final exam (30%) See date below

- For all exams, you may have one note card **3 in x 5 in** (index card). It must be a **hand-written** note on both sides.
- No make-up exam under any circumstance. If you missed any exams, you must get approval from instructor. It is up to instructor's decision to approve case by case scenario. **If you missed an assignment or exam, you must have proper documentation such as medical conditions, military order, or death in a family, etc (discuss and get approval from me on case by case scenario). Otherwise, there will not be a make-up option and you will get ZERO for the assignment. I will NOT drop any assignment.**

GMU Honor Code is in effect at all times

Grading scale: A+ = 98+, A = 90-97, B+ = 87—89, B = 80- 86, C+ = 78- 79, C = 70-77, D = 60-69, F = 59 or below

Honor Code: THIS IS IMPORTANT. It is expected that each student in this class will conduct himself or herself within the guidelines of the Honor Code. Among other things, this means that sharing information of any kind about exams or quizzes (either before or during the exam) will result, at a minimum, in a grade of zero for all parties involved. All work must be your own and submitted by you as the student registered for the class. The right is reserved to check a picture identification during any of the exams. Internet capable devices and other electronics **If you caught cheating, you will earn an F for the course.**

ALL electronic devices except approved calculator will NOT be allowed during exam.

See academicintegrity.gmu.edu for a copy of the Honor Code. **University Honor Code:** You are expected to follow the GMU Honor Code <https://oai.gmu.edu/mason-honor-code/>

Cell Phones and Computers: I expect to receive the same level of respect that I give to you. This means that cell phones and computers are not to be used during class. Your cell phone (or any internet capable device) should be on silent or vibrate during lecture and I should not see them at all during tests or quizzes. If I notice you have a cell phone (or any internet capable device) in your line of sight during a test or quiz then I will assume that it is an Honor Code violation and take appropriate action. This could result in you failing the assignment, failing the class or being suspended from the university.

Accommodations: If you are a student with a disability and you need academic accommodations, please see me and contact the office of Disability Services. All academic accommodations must be arranged through that office. Office of Disability Services Student Union Building I (SUBI), Room 4205 Phone: 703.993.2474

Unscheduled and Late Closings Policy: If the university has an unscheduled closing-because of weather or some other unforeseen occurrence you should assume that we will pick up with the schedule where we left off. In particular, if a test was scheduled for a day in which school was canceled or an assignment was due that day you should assume that the test will be given or the assignment will be collected the next time class meets. If the university has a late opening on a class day we will begin class at the time the university opens. A test scheduled for a day the university opens late will be postponed until further notices.

Final remarks: This class requires a lot of time to do all the necessary work. If you do not have the time, you are strongly urged to take this class some other semester. Obtaining Help There are many outlets available for you to get help in this class. I understand that the pace of the class is very quick so I will try to be available as much as I can to students. In addition to my set weekly office hours, I am very happy to schedule appointments.

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>

Week 1	Syllabus and CH 1.3 Estimate
Week 2	Ch 2.1 set notation – 2.2 subsets
Week 3	Ch 2.3 Venn& set operation – 2.4 survey
Week 4	Ch 3.1 logic Ch 3.2 Truth table
Week 5	Ch3.3 Logical equiv.-DeMorgan’s Law+ EXAM 1
Week 6	Ch 4.1 – 4.3 ratio, rate, and proportion and %
Week 7	Ch 4.4 App. Of % + Ch 7.1 intro Probability
Week 8	Ch 7.2-7.3 Probability rules
Week 9	Ch 7.4 Combination & permutation + 7.5 (Extra)
Week 10	Exam 2 + start Ch 1.1 and 8.1
Week 11	CH 8.2 + 8.3 Measures of dispersion/position
Week 12	Ch 8.4+8.5 normal distribution
Week 13	Make up lecture+ Final review
Week 14	Final Exam

FINAL EXAM MONDAY DECEMBER 13, 2021 @ 4:30 PM