

George Mason University
Math 106 - 013
Quantitative Reasoning

Instructor: Trey Andreani
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Office: Exploratory Hall 4405
In-Person Office Hours: MW 12:15-1:15pm

Class: MW 1:30-2:45pm
Room: Innovation Hall 134
Online Office Hours: F 12:00-1:00pm
Zoom ID: 541 952 8897

Prerequisite: C or better in MATH 213 or MATH 215.

Description: Quantitative skills for the real world. Topics include critical thinking, modeling by functions, graphs, growth, scaling, probability and statistics.

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: *Viewing Life Mathematically, 2nd edition* by Denley. Your course fees paid for access to the eBook and online homework system. **YOU DO NOT NEED TO SPEND ANY MORE MONEY ON ANY MATERIALS (except a calculator) FOR THIS CLASS.** You may choose to also purchase the printed book from the bookstore, but most students are fine without it. Follow prompts for [HAWKES](#) on Blackboard.

Technology: Needed equipment: INTERNET, COMPUTER, EXCEL, Calculators: You will be required to have a scientific calculator for the course (with an e^x function and factorial function). We are recommending the TI-83/84 (ONLY IF YOU HAVE ONE ALREADY) or TI-30II.

Exams: There will be three exams during the course. You may not leave the classroom during an exam for any reason. Please come to class prepared. Make-up exams will only be given for extreme circumstances, must be accompanied by official documentation, and I must be notified in advance. Your lowest exam score will be dropped.

Final Exam: The final exam will be cumulative. The date and time are set by the university, and are non-negotiable.

Grading:

Participation - 10%

Hawkes Certify - 20%

In-Class Quizzes - 10% (Lowest two scores dropped)

Exams - 20% each (Lowest score dropped)

Final Exam - 20%

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

HOW TO USE HAWKES Each lesson of the software offers three modes:

1. Learn is an interactive presentation of the material found in your textbook and includes instructional video clips and example problems.
2. Practice gives you access to unlimited practice problems, provides error-specific feedback for commonly made mistakes, hints for all incorrect answers, and includes an interactive Tutor with Step-by-Step guidance and fully worked out solutions. Note that every question type from Certify can be found in the Practice mode.
3. Certify is the homework portion of the lesson. After answering the set of questions without exceeding the available strikes (or lives), you will receive a perfect 100% score for your homework. If you are not able to Certify in your attempt, you are able to start a new set of questions over again with no penalty. In the meantime, you may wish to spend more time in the Practice mode before attempting Certify again. You have unlimited attempts in each lesson to receive full credit before the due date.

Additional videos can be found at www.hawkestv.com.

GETTING HELP

Contact Hawkes with any technical questions, including creating your username and password, finding your Access Code or license number, or completing your work.

Phone: 1.800.426.9538 available Monday-Friday, from 8:00am-10:00pm ET.

Email: support@hawkeslearning.com

Chat: www.hawkeslearning.com/chat Chat support is available 24/7.

Blackboard Login Instructions: All users access Blackboard through the myMason portal. To access Blackboard, log in to mymason.gmu.edu and select the Courses tab. Faculty and students will gain access to their courses from this location.

Diversity, equity and inclusion: George Mason University is an intentionally inclusive community that promotes and maintains an equitable and just work and learning environment. We welcome and value individuals and their differences including race, economic status, gender expression and identity, sex, sexual orientation, ethnicity, national origin, first language, religion, age, and disability. Please email me if you have any concerns about any feeling of inequity in this course.

Religious Holidays: GMU is accommodating to all religious holidays observed by its students and faculty. It is each student's responsibility during the first two weeks of the semester to inform instructors the dates of any major religious holidays on which the student will be absent or unavailable due to religious observances. <https://ulife.gmu.edu/religious-holiday-calendar/>

Disability statement: If you are a student with a disability and you need academic accommodations, please contact Disability Services at 703.993.2474. All academic accommodations must be arranged through that office. Your accommodations sheet must be submitted on Blackboard at least one week prior to any assessment that you are requesting accommodations for. <https://ds.gmu.edu/>

GMU Math Tutoring Center: The Math Tutoring Center will be offering online tutoring services to students currently enrolled in undergraduate Math courses at GMU. More information can be found at:

<https://science.gmu.edu/academics/departments-units/mathematical-sciences/math-tutoring/tutoring-center>

Academic Integrity: In your application to GMU, you signed an agreement to adhere to the Honor Code, which states that you must not “cheat, steal, plagiarize, or lie in matters related to your academic work.”

University Honor Code: You are expected to follow the GMU Honor Code <https://oai.gmu.edu/>

Student Privacy/FERPA: The Family Educational Rights and Privacy Act of 1974 (FERPA) is a federal law that governs the education records of eligible students. It grants students continuous access to their education records upon request, allows students to amend their records if they feel they're inaccurate, and restricts how and when their education records can be disclosed. <https://registrar.gmu.edu/ferpa/>

Netiquette: Craft your messages carefully to avoid misinterpretation. Keep these online communication strategies in mind:

- Avoid vague words, jargons, and sarcasm—any rude or disrespectful posts will result in a grade deduction
- Edit meticulously

Additional Resources/Student Services:

- Keep Learning, Learning Services <https://learningservices.gmu.edu/keeplearning/>
- Counseling and Psychological Services <https://caps.gmu.edu/>
- University Libraries <https://library.gmu.edu/>
- See a longer list of Mason student support services posted on The Stearns Center website: <https://stearnscenter.gmu.edu/knowledge-center/knowning-mason-students/student-supporthttps://stearnscenter.gmu.edu/knowledge-center/knowning-mason-students/student-support-resources-on-campus/resources-on-campus/>

Important Dates:

Last Day to Drop (No Tuition Penalty) - September 6

Last Day to Drop (50% Tuition Penalty) - September 13

Last Day to Drop (100% Tuition Penalty) - September 27

Final Exam - Wednesday, December 7 1:30-4:15pm

Schedule: (Subject to Change)

Week	Monday	Wednesday
1 (8/22-24)	1.2, 4.1	4.1, 4.2
2 (8/29-8/31)	4.3, 4.4	4.4, 4.5
3 (9/5-9/7)	<i>No Classes (Labor Day)</i>	5.1, 5.2
4 (9/12-9/14)	5.2	5.7
5 (9/19-9/21)	<i>Review</i>	Exam 1
6 (9/26-9/28)	6.1	6.2
7 (10/3-10/5)	6.3	6.4
8 (10/10-10/12)	7.4 <i>(We meet on Tuesday!)</i>	7.5
9 (10/17-10/19)	<i>Review</i>	Exam 2
10 (10/24-10/26)	10.1	10.2
11 (10/31-11/2)	10.3	10.4
12 (11/7-11/9)	11.1	11.2
13 (11/14-11/16)	11.3	11.4
14 (11/21-11/23)	Exam 3	<i>No Class (Thanksgiving)</i>
15 (11/28-11/30)	<i>Review</i>	<i>Review</i>