

Instructor: Mrs. Maliha J. Luqman

Email: mluqman@gmu.edu

Office Hours:

In person: MW 12:00-1:00PM, Exploratory 4309

Zoom: TR 12:00-1:00PM,

<https://gmu.zoom.us/j/2179107616>

Please email if these don't work for you.

Course Information:

Section: 002 - 3 credits

Face-to-face Class: MW 10:30AM-11:45AM

Horizon 3012

Course Description

Course Description and Objective:

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

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.

Textbooks and Materials

Text/Online Learning System: 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.

Equipment:

- Computer with Internet to access Hawkes and Blackboard
- Calculators: You will be required to have a calculator for the course with an ex function and factorial function (!). We are recommending the TI-83/84 (ONLY IF YOU HAVE ONE ALREADY) or TI-30II.
- Dry-erase markers for learning in the classroom

Assessments and Grading Scale

Posting of Grades: Student assignments will be evaluated within a week and posted to Blackboard one week after the assignment due date.

Grading Scale:

A	A-	B+	B	B-	C+	C	C-	D	F
93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	60-69	0-59

There are 6 components that will determine your grade:

1. Office Hour Visit – 2%
2. In class activities (will drop 3 lowest) – 13%
3. In class quizzes (will drop 2 lowest) – 10%
4. Hawkes Certify – 10%
5. Exams (3 given in-class, about 1.5 hours each) – 15% x 3
6. Comprehensive Final Exam – 20%

Assessments

- **Office Hour Visit (2%):** You are required to visit me at least once during office hours. If you have no questions and/or concerns, at least stop by for 10-15 minutes to introduce yourself.
- **In-class Activities (13%):** Math is an active sport, missing even one day can impair learning. Though Attendance is not part of your grade, there will be weekly in-class activities in which you can *collaborate with your classmates*, you may miss three of these with no grade penalty. Students are expected to be in class on time and to be actively working on math while they are in class. Have all supplies near you when class starts (dry-erase marker, pencil and paper). Students should be respectful in class (participate only in discussions relative to the class, mute cell phones.) All assignments are to be submitted by the end of class. Late assignments will not be accepted; however, your three lowest scores will be dropped at the end of the semester.
- **In-Class Quizzes (10%):** Quizzes will be open-note and will be completed *individually*. There are no make-up quizzes. However, your two lowest scores will be dropped at the end of the semester.
- **Hawkes Certify (10%):** You must attain “mastery” in the certify portion of your assignment to receive credit for that section.
- **Exams (45%):** There will be two in-class exams in addition to the comprehensive final. Cheating of any form will not be tolerated. Exams will be conducted in-class. I allow an exam-swap policy, whereby if the grade on your Final Exam is higher than your lowest exam score, the lowest exam score will be replaced with your final. As a result, missing exams for non-emergency reasons results in a zero on the exam.
- **Final Exam (20%):** The final exam is comprehensive. The final exam is worth 20% of your grade. The Final Exam will also be conducted in person on **Wednesday, December 7 at 10:30AM-1:15PM**. There will be no make-ups permitted for the final exam. The date is already set by the university, so please do not make other plans on the date of the final exam such as appointments, early vacation departures, family outings, etc. Such changes are not negotiable.
- **Extra Credit:** There will be NO extra credit assigned. Please do not ask.

Blackboard & Hawkes

- **BLACKBOARD**

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.

Communication

I frequently send announcements through email via Blackboard announcements. You can refer to past announcements in Blackboard if you have trouble going through your email. Faculty, staff, and administrators communicate with students through their official GMU email accounts (@gmu.edu). Students are likewise required to use their Masonlive email accounts (@gmu.edu or @masonlive.gmu.edu) to communicate with instructors and other college personnel and should check their email accounts regularly. I will use Blackboard to post announcements, grades and other important information pertaining to the class.

Instructors receive a significant number of emails from students over the course of the semester. To specifically identify the course in which the student is enrolled, all email from the student must include the course and section number (e.g., MATH 106 – 002, Absence) in the subject of the email.

- **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.

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.

Additional Resources and Information

Academic Integrity: Violations of the honor code will not be tolerated.

Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

Mason Honor Code is available at: <https://oai.gmu.edu/mason-honor-code/>

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/>

COVID safety plan: <https://www.gmu.edu/safe-return-campus>

Tutoring Center: The Mathematics Tutoring Center is offering online tutoring services to students currently enrolled in undergraduate math courses at GMU. Please see the website for details: <http://math.gmu.edu/tutor-center.php>

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

ITS Support Center: The ITS Support Center serves as the central point of contact for the university community for requesting IT support or information. Additional details and resources are located at <https://its.gmu.edu/service/its-support-center/> Email support@gmu.edu or call 703-993-8870 for technical support.

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-supportresources-on-campus/>

Important Campus-wide Dates

Classes Begin	Monday, August 22
Last day to add	Monday, August 29
Labor Day – University closed	Monday, September 5
Last day to drop a class with a tuition refund	Tuesday, September 6
Last day to drop (50% refund)	Tuesday, September 13
Unrestricted Withdrawal Period (W on transcript) <ul style="list-style-type: none"> If you do not withdraw by this date and <u>do not complete your assignments</u>, your grade will be based on what you have submitted, this is usually an F. 	September 14-27
Fall Break	Monday, October 10
Selective Withdrawal Period (W on transcript) <ul style="list-style-type: none"> If you do not withdraw by this date and <u>do not complete your assignments</u>, your grade will be based on what you have submitted, this is usually an F. You are limited to 3 withdrawals in your academic career 	September 28-October 24
Thanksgiving Break – University closed	Wednesday, November 23- Sunday, November, 27
Final exam	Wednesday, December 7 – 10:30AM-1:15PM

Tentative Schedule

	Date	Sections and Topics:	Assignments
Week 1	M: 08/22	3.1 Logic Statements and Their Negations	Activity 1
	W: 08/24	3.2 Truth Tables 3.3 Logical Equivalences	Quiz 1 Hawkes: 3.1-3.2
Week 2	M: 08/29	3.4 Valid Arguments and Fallacies	Activity 2
	W: 08/31		Quiz 2 Hawkes: 3.3-3.4
Week 3	M: 09/05	NO CLASS	
	W: 09/07	1.2 Estimating 4.1 Proportions, Percentages and Ratios 4.2 Using Percentages	Activity 3 Hawkes: 1.2, 4.1, 4.2
Week 4	M: 09/12	4.3 Rates, Unit Rates and Rates of Change	Activity 4
	W: 09/14	4.4 Using Rates for Dimensional Analysis 4.5 Proportionality	Quiz 3 Hawkes: 4.3-4.5
Week 5	M: 09/19	5.1 Linear Equations and Functions	Activity 5
	W: 09/21	5.2 Linear Modeling 5.7 Exponential Functions	Quiz 4 Hawkes 5.1,5.2, 5.7
Week 6	M: 09/26	Exam 1: 1.2, 3.1-3.4, 4.1-4.5, 5.1, 5.2, 5.7	
	W: 09/28	6.1 Understanding Interest 6.2 Saving and Investing	
Week 7	M: 10/03	6.3 Borrowing Money	Activity 6
	W: 10/05	6.5 Budget	Quiz 5 Hawkes: 6.1-6.3, 6.5
Week 8	T: 10/11	7.4 The Metric System	Activity 7
	W: 10/12	7.5 Converting between the US Customary System and the Metric System	Quiz 6 Hawkes: 7.4, 7.5
Week 9	M: 10/17	Exam 2: 6.1-6.3, 6.5, 7.4-7.5	
	W: 10/19	10.1 Introduction to Probability	
Week 10	M: 10/24	10.2 Counting Outcomes	Activity 8
	W: 10/26	10.3 Probability of Single Events	Quiz 7 Hawkes: 10.1, 10.2
Week 11	M: 10/31	10.4 Addition and Multiplication Rules of Probability	Activity 9
	W: 11/02		Quiz 8 Hawkes: 10.3, 10.4
Week 12	M: 11/07	11.1 Statistical Studies	Activity 10
	W: 11/09	11.2 Displaying Data	Quiz 9 Hawkes: 11.1, 11.2

Week 13	M: 11/14	11.3 Describing and Analyzing Data 11.4 The Normal Distribution	Activity 11
	W: 11/16		Quiz 10 Hawkes: 11.3, 11.4
Week 14	M: 11/21	Exam 3: 10.1-10.4, 11.1-11.4	
	W: 11/23	<i>NO CLASS</i>	
Week 15	M: 11/28	Final Exam Review	
	W: 11/30		
Week 16	W: 12/07	Cumulative Final Exam (10:30AM-1:15PM)	

****ITEMS ARE SUBJECT TO CHANGE AND WILL BE UPDATED ON BLACKBOARD ACCORDINGLY.****