

Math 106 - Quantitative Reasoning
George Mason University
Summer 2020, C Session

General Information:

Location:	Blackboard: https://mymason.gmu.edu/
Date Range:	July 6 - August 8, 2020
Instructor	Hannah Klawa
Email	hklawa@gmu.edu
Online Office Hours	MTWR 10:30 AM - 11:30 AM and by appointment
Location of Office Hours	Online via "Online Office Hour" link in Blackboard

Email: Please feel free to email me if you have any questions during the course (it is best to ask homework and concept questions via the discussion forum in Blackboard rather than email). Please note that all emails to me *must* be sent through your official GMU student email account. If you email me from a non-GMU email, you will not get any response. Also, please use the following subject line format

MATH-106 - Subject of Email

If you do not receive a response to your email sent from your official GMU student email within 36 hours, please resend it but please do not send the same email again before that time frame.

Asking Questions During Office Hours: You will be able to ask questions via chat or unmute your mic and ask relevant questions any time during the online office hour. You do not need to raise your hand. If you hear another student ask a question and I did not hear what the question was or you see a chat question got overlooked due to volume of chats, you can help to ask the question. Please do remember that a civil, academic learning environment must still be maintained. Note that this is only for this particular course. Please follow your instructor's preferred method for questions in your other courses.

Text: Viewing Life Mathematically (custom for GMU) by Denley. Please use the free 10-day trial when you start using this system just in case you have a change of plans after a week or so. Follow prompts for Hawkes on Blackboard.

Technology: You will need a computer with reliable internet access. You will also be required to have a calculator for the course with an e^x function and factorial function (!). We are recommending TI-83/84 (ONLY IF YOU HAVE ONE ALREADY) or TI-30II. You will also be prompted to use Excel for some more involved calculations. As an active GMU student, you have access to Excel for free. You can find the details at <https://its.gmu.edu/service/office-365-proplus/>.

Course Description and Learning Objectives: 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.

The course will introduce the following material: Inductive and Deductive Reasoning, Sets, Logic, Counting, Probability, Statistics and Finance.

Grading Scheme: Your grade will be weighted as follows:

Category	Weight
Introduction Post	5%
Syllabus Quiz	5%
Show-Work Problems	20%
Hawkes Certify (Online HW)	25%
4 Tests	30%
Final Exam	15%

Your letter grade will be determined based on the following grading scale.

Grading Scale	Letter Grade
90 – 100%	A- to A+
80 – 89%	B- to B+
70 – 79%	C- to C+
60 – 69%	D- to D+
0 – 59%	F

In each range, + or – is for the upper or lower 2 points in the score range.

Lecture Material: All lecture videos and handouts will be provided in Blackboard in asynchronous format.

Syllabus Quiz: Please carefully read the entire syllabus and simultaneously complete the syllabus quiz in Blackboard as soon as possible! Have a copy of the syllabus with you when you take the quiz (it is open notes) and you can retake it as many times as you want before the deadline. If you have any questions regarding anything in the syllabus, please email me. It is very important to get clarification quickly on anything that is not clear as this is a very fast-paced course.

Show-Work Problems: Each week, you will have a show-work assignment in Blackboard. You will write or type your work for the problem and show/explain how you arrived at your final answer. You must carefully show all steps and explain your reasoning to get credit. On the show-work problems, final answers without supporting work and explanations will be given no credit even if the final answer is correct. You will lose credit for incorrect work/explanation even if your final answer is correct.

Online Homework: Your homework grade in this course comes entirely from the Hawkes online homework system. There are **late penalties for late homework**. There is a 5% late penalty for anything that is up to 1 day late, 10% penalty for up to 2 days, 20% penalty for up to 3 days late, and 35% penalty for anything more than 3 days late.

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 WITH HAWKES

I am not able to provide technical support. If you run into technical problems including creating your username and password, finding your Access Code or license number, or completing your work, please contact Hawkes.

Phone: 1.800.426.538 Available Monday-Friday, from 8:00 AM - 10:00 PM ET.

Email: support@hawkeslearning.com

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

While I can't provide technical support, let me know if there is any extended problem with Hawkes that you are running into. Post a thread in the "Technical and Logistical Questions" or respond to a current one when there is a problem.

Discussion Board: You are encouraged to participate in the discussion forum each week. Please use the course discussion forum for questions related to the content or course set-up. Be sure to either reply to an appropriate existing thread or create a new one with a meaningful subject line. Your post can show your work, ask a question or answer a question. If you want to include mathematical work, you can insert an image (do not use attachment) or type the question using the math editor.

Discussion Board Policy: You are expected to be respectful of everyone in the course discussion forum and maintain professional communication. Review the

- Student Code of Conduct:
<https://studentconduct.gmu.edu/university-policies/code-of-student-conduct/> and
- Core Rules of "Netiquette"
<http://www.albion.com/netiquette/corerules.html>.

Carefully craft your communication to avoid misinterpretation.

Tests: Each test will become available in Hawkes on Thursday at 12:00 PM ET and must be taken before the deadline. You will have 60 minutes or until the deadline. For each of the four tests, there will be two attempts and your highest score will be used in the final grading. So do not wait until last minute to begin any test or you will not have the full amount of time to complete it.

1. Test 1 due 7/10/2020 at 11:59 PM ET
2. Test 2 due 7/17/2020 at 11:59 PM ET
3. Test 3 due 7/24/2020 at 11:59 PM ET
4. Test 4 due 7/31/2020 at 11:59 PM ET

There will be **no make-up** tests given.

Final Exam: The final exam will be online in Hawkes **due Friday August 7th at 11:59 PM ET**. There will be **only one attempt** and **no make-up** exam given.

Accessibility: Disability Services at George Mason University is committed to providing equitable access to learning opportunities for all students by upholding the laws that ensure equal treatment of people with disabilities. If you are seeking accommodations for this class, please first visit <http://ds.gmu.edu/> for detailed information about the Disability Services registration process. Then please discuss your approved accommodations with me. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu | Phone: (703) 993-2474

Technical Assistance: You have free technical support as a GMU student. For technical assistance (non-Hawkes), please visit <https://its.gmu.edu/service/its-support-center/> for details. Please contact GMU ITS if you have any technical difficulties as I am not able to provide technical support. Please let me know if there is any extended technical problem that you run into. You can post a thread in the “Technical and Logistical Questions”.

Math Tutoring Center: You can get free tutoring for this class online from the Math Tutoring Center <https://science.gmu.edu/academics/departments-units/mathematical-sciences/math-tutoring/tutoring-center-hours-and>. Do not hesitate to utilize this additional help that is available to you!

University Honor Code: You are expected to follow the GMU Honor Code <https://oai.gmu.edu/mason-honor-code/>. In this class,

- You are allowed to discuss homework problems (Hawkes homework and show-work problems) with each other and myself in the course discussion board in Blackboard, use the GMU math tutoring center, or send me an email.
- You are responsible for working the tests and final exam independently by yourself. You are allowed to use any notes you have taken and your calculator.

Some Additional Resources/Student Services:

- Student Privacy Rights: <https://registrar.gmu.edu/ferpa/>
- Keep Learning, Learning Services: <https://learningservices.gmu.edu/keeplearning/>
- University Libraries: <https://library.gmu.edu>
- Counseling and Psychological Services: <https://caps.gmu.edu>
- Student Support and Advocacy Center: <https://ssac.gmu.edu/>
- University Career Services: <https://ssac.gmu.edu/>