Math 106 Section 003 Spring 2022 Syllabus

Instructor: Shamsedin Fahiminia
EMAIL: (for general communications) sfahimin@gmu.edu; However, for questions, especially mathematical ones, I prefer to answer them during (class or) office hours. You may also get help (for your math questions) from the **Tutoring Center**; see below for more details.

Class time: 5:55 – 7:10 pm Tuesday and Thursday, Innovation Hall, Room 134

Office hours: ***Tuesdays 12:00-1:00 pm, and Thursdays 3:15-4:15 pm***; Location: Exploratory Hall building, Room # 4309 (Any change in the Office Hours scheduling will be announced accordingly.)

Textbook: Viewing Life Mathematically (Custom for GMU) by Denley. We will be using the online learning management system called Hawkes for this class and e-Textbook is available on Hawkes. Follow prompts for HAWKES on Blackboard. PLEASE NOTE THAT YOU WILL NEED TO PAY **(less than $100)** for this system after the first week of class in order to continue accessing the learning system, homework and some quizzes/tests.

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.

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

Quizzes: There will be in-class quizzes approximately one per week, to be held typically on Thursdays at the beginning of the class and just about 10-15 minutes. I plan to drop a quiz or two quizzes to account for ***COVID ABSENCES.***

Tests: There will be in-class Tests (Test 1, 2 and 3 each 20%) and Final Exam 20%, to be held in class. I plan to drop a Test to account for ***COVID ABSENCES***.

Retaking Tests and Quizzes: ****NO retakes for Tests, Quizzes and the Final Exam****

Hawkes Certify: Certify will be due at 11:59 PM EST Fridays (in Hawkes) each week according to the schedule below.

Weeks-Due Dates	*Tentative Schedule for Lessons*	*Quizzes & Tests IN CLASS*	*Important Dates*
1- Jan 28	**1.3, 2.1, 2.2 (Estimates, Set notation, Subsets and Venn Diagrams)**		
2- Feb 4	**2.3, 2.4 (Set operations and Surveys)**		**Last Day to Add, Jan 31**
Week 3	**Review**	***Test 1 (Thursday) 20% Chapters 1&2***	**Last Day to Drop: 100% Tuition Refund, Feb 7**
4- Feb 18	**3.1, 3.2, 3.3 (Logic, negations, truth tables, Logical equivalence and DeMorgan's Laws)**	**3.3 (bonus)**	**Last Day to Drop: 50% Tuition Refund, Feb 14**
5- Feb 25	**4. 1, 2, 3, 4 (Rates, Ratios, Proportions and %)**		
Week 6	**Review**	***Test 2 (Thursday) 20% Chapters 3&4***	
7- Mar 11	**7.1, 7.2, 7.3 (Intro Probability, Addition and Multiplication Rules Prob.)**		
Week 8	**Spring Recess, Mar 14 – Mar 20 (no classes)**		**Spring Recess**
9- Mar 25	**7.4, 7.5 (Combinations and Permutations, Combining Prob. And Counting Techniques)**	**7.5 (bonus)**	
Week 10	**Review**	***Test 3 (Thursday) 20% Chapter 7***	
11- Apr 8	**1.1 (Collecting Data, Data graphs)**		
12- Apr 15	**8.1, 8.2 (Measures of center and Dispersion)**		
13- Apr 22	**8.3, 8.4 (Measures of relative Position, Normal Distributions)**		
14- Apr 29	**8.5 (Finding Prob. Using Standard Nor Dis)**		
Week 15	**Final Exam review**		**Last Day of Class, May 7**
Week 16	**Reading days, (no classes)** **Final Exam in Class, May 12**	***Final Ex (Thursday) 20%*** **4:30-7:15 pm**	**Reading Day(s)**

Final Exam: ***May 12, Thursday from 4:30-7:15 PM.*** All students are required to take the Final at this time.

Being on Time: Students must be on time to take Tests, Quizzes and Final Exam, and May not leave the classroom during Tests, Quizzes and Final Exam. Your ID must be available during Tests, Quizzes and Final Exam. During Tests, Quizzes and Final Exam Laptop is necessary.

Grading: Your grade will be weighted as depicted in the table below

Assignment	**Time**	**Location**	**Weight**
Hawkes Certify	***Every week*** Due Fridays	Home	10%
Average of Quizzes	***Thursdays*** at the beginning of the class (10-15 min)	In class	10%
Test 1 **Bring Laptop** (Chapters 1 and 2)	Thursday ***Feb 10***	In class	20%
Test 2 **Bring Laptop** (Chapters 3 and 4)	Thursday ***Mar 3***	In class	20%
Test 3 **Bring Laptop** (Chapter 7)	Thursday ***Mar 31***	In class	20%
Final Exam **Bring Laptop** (Cumulative test)	Thursday ***May 12***	In class	20%

The grading scale will be: A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%; F: below 60%.

+ Or – may be attached to the grade for the upper or lower 2 points in each range

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.

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. https://ds.gmu.edu/

Honor Code: THIS IS IMPORTANT.

It is expected that each student in this class will conduct themselves within the guidelines of the Honor Code. Among other things, this means that sharing information of any kind about exams or quizzes is not permitted. 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 are not permitted to be used during quizzes and during tests your laptop may only be used to access Blackboard and Hawkes Learning.

University Honor Code: You are expected to follow the GMU Honor Code https://oai.gmu.edu/mason-honor-code/

Mutual Respect, and the Use of Cell Phones/Laptops: In order to show respect to all individuals in the classroom, your cell phone (or any internet capable device) should be on silent or vibration during the lectures. ***You must bring your Laptop during the examinations, however, cell phones are not to be used. Any use of a cell phone or smart watch etc. during an exam will be considered as cheating, and will be reported to the office of academic integrity (https://oai.gmu.edu/)***

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.

GMU Math Tutoring Center: The Math Tutoring Center will be offering in-person and 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-hours-and

Additional Resources/Student Services:

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