

Math 106 Section C01 Summer 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: 10:30 am – 12:35 pm Monday, Tuesday, Wednesday, and Thursday (MTWR), Horizon Hall Room 3012.

Office hours: **Tuesdays 9:15 am- 10:15 am**; 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. 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.

Calculator: Cellphone calculator may not be used on Tests/Quizzes. Bring a calculator to class.

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 two per week, to be held typically at the beginning of the class and just about 10-15 minutes.

Tests: There will be in-class Tests (Test 1, and 2, and Test 3 **each 20%**) and Final Exam **20%**, to be held in class.

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

****Two quizzes and one test will be dropped to account for Covid/Other absences.**

Chapters and Sections that I am going to teach in Math 106:

Chapters	Sections
Chapter 1	1.3 , (Estimates)
Chapter 2	2.1, 2.2, 2.3, 2.4 (Set notation, Subsets and Venn Diagrams, Set operations and Surveys)
Chapter 3	3.1, 3.2, 3.3 (Logic, negations, truth tables, Logical equivalence and DeMorgan's Laws)
Chapter 4	4.1, 4.2, 4.3, 4.4 (Rates, Ratios, Proportions and %)
Chapter 7	7.1, 7.2, 7.3, 7.4, 7.5 (Intro Probability, Addition and Multiplication Rules Prob., Combinations and Permutations, Combining Prob. And Counting Techniques)
Chapter 8	1.1, 8.1, 8.2, 8.3, 8.4, 8.5 (Collecting Data, Data graphs, Measures of center and Dispersion, Measures of relative Position, Normal Distributions, Finding Prob. Using Standard Nor Dis)

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

Assignment	Time	Location	Weight
Hawkes Certify	According to the schedule	Home	10%
Average of Quizzes	According to the schedule	In class	10%
Test 1 (Chapters 1 and 2)	June 30	In class	20%
Test 2 (Chapters 3 and 4)	July 11	In class	20%
Test 3 (Chapter 7)	July 18	In class	20%
Final Exam Laptop (Cumulative test)	July 29	In class	20%

Hawkes Certify: Certify will be due at **11:59 PM EST** (in Hawkes) according to the schedule below:

<i>Sessions</i>	<i>Quizzes & Tests IN CLASS</i>	<i>Tentative Schedule for Teaching</i>	<i>Tentative Schedule for Lessons/Certify Due dates</i>	<i>Important Dates</i>
1- June 27, Mon	Quiz 1 (Syllabus quiz)	1.3, 2.1, 2.2	1.3, 2.1	First Day of Classes
2- June 28, Tue		2.3, 2.4	2.2, 2.3	
3- June 29, Wed	Quiz 2 (Sec 2.3)	Review Chaps 1 and 2	2.4	Last Day to drop without penalty
4- June 30, Thu	Test 1 (Chaps 1, 2)	3.1		
5- July 4, Mon		No Classes		Independent Day
6- July 5, Tue		3.2, 3.3	3.1, 3.2	Last day to drop with 50% liability
7- July 6, Wed	Quiz 3 (Sec 3.2)	4.1, 4.2, 4.3, 4.4	3.3, 4.1	
8- July 7, Thu	Quiz 4 (Sec 4.2)	Review Chaps 3 and 4	4.2, 4.3, 4.4 (July 10)	
9- July 11, Mon	Test 2 (Chaps 3, 4)	7.1		
10- July 12, Tue	Quiz 5 (Sec 7.1)	7.2, 7.3	7.1	
11- July 13, Wed		7.4, 7.5	7.2, 7.3	
12- July 14, Thu	Quiz 6 (Sec 7.4)	Review Chap 7	7.4, 7.5 (July 17)	
13- July 18, Mon	Test 3 (Chap 7)	1.1		
14- July 19, Tue		1.1, 8.1	1.1	
15- July 20, Wed	Quiz 7 (Sec 1.1)	8.2	8.1	
16- July 21, Thu	Quiz 8 (Sec 8.1)	8.3	8.2	
17- July 25, Mon		8.4	8.3	
18- July 26, Tue	Quiz 9 (Sec 8.3)	8.5	8.4	
19- July 27, Wed	Quiz 10 (Sec 8.4)	Review All Chaps	8.5	
20- July 28, Thu		Practice Paper Final		Last Day of Classes
21- July 29 Friday	Final Exam , All Chaps (Cumulative Exam)			Final Exam, 10:30 am- 1:15 pm

Final Exam: July 29, Friday from 10:30 am- 1:15 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 Final Exam Laptop may be necessary.

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 and quizzes, 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/knowning-mason-students/student-support-resources-on-campus/](https://stearnscenter.gmu.edu/knowledge-center/knowning-mason-students/student-support-resources-on-campus/)