Math 106- 007 Spring 2022 Syllabus **Instructor:** Susan Calderon
Meeting Times: M/W, 12:00-1:15pm Location: Innovation Hall, rm:206

OUT OF CLASS LEARNING:

You have support, apart from class, through the Hawkes Learning system (good videos and learn section) and my office hours

EMAIL: scalder1@gmu.edu - I answer emails once a day (Monday – Friday). When emailing me, be sure to put "MATH 106-007," followed by **your** first & last name in the subject line.

Office hours: M/W 10:00 am or by appointment. Location: Innovation room 206

Text: Viewing Life Mathematically by Denley. This is an online system. You may use the free 20-day trial when you start using this system. You must register with payment before the 21st day. Follow prompts for HAWKES on Blackboard.

Calculators: You will be required to have a calculator for the course with an $\mathbf{e^x}$ function and factorial function (**!**). We are recommending the TI-30XII or TI-83/84 plus (more expensive than TI-30XII, not necessary, if you don't already have it)

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, and Statistics

- **Final Exam: Monday, May 16, 10:30-1:15pm, our classroom**

Tests must be taken on the scheduled dates. No make-up tests can be given.

Grading: Your grade will be weighted as follows:

106-007 -Quantitative Reasoning work:	Overall % of your final grade
Quizzes	10%
Participation/attendance	10%
4 Tests (lowest grade test will be dropped	15% each(45%total)
HAWKES Online HW (Certify)	15%
Cumulative Final Test	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

Lectures: We will cover about 1 section per class. There are also videos on the HAWKES system. They provide support for your learning. Please take advantage of the resources available to you!

Online Homework: Your homework grade in this course comes entirely from the HAWKES on-line homework system.

Discussion Board: I will make the discussion board available as a place where you and your classmates can work together, if you like.
It is optional whether you use it or not. If you'd like me to look at something that you posted on the board, let me know during class or office hours. Otherwise, it is yours for chatting. Please, no inappropriate remarks.

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

IMPORTANT:

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.

Tutoring Center: The Math Tutoring Center is located in the Johnson Center Room 344. For hours of operation see *http://math.gmu.edu/tutor-center.php*

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

Equity: 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 talk to me if you have any concerns about any feeling of inequity in this class.

Below is a **tentative** schedule for the course. You must attend class to verify exactly where we are in the material and when the next test is. Some changes in the schedule may occur:

NOTE: The homework for each lesson taught is due by 9:00 am the morning of the next class.

Tentative Schedule Outline:

CLASS MEETINGS	TOPICS COVERED	NOTES
Jan. 24/26	1.3 and 2.1 Estimates, Set notation	
Jan. 31/Feb. 2	2.2 & 2.3 Subsets, Venn and Set operations	
Feb. 7/9	No class/ 2.4 Applications and Surveys	
Feb. 14/16	3.1 & 3.2 Logic, negations, truth tables	
Feb. 21/23	3.3 Logical equivalence and De Morgan's	Test 1: 2/23/22
Feb.28/March 2	4.1 Rates & 4.2 Ratios	
March 7/9	4.3 & 4.4 Proportions & Percentage problems	Test 2: online, due 3/21/22
March 14/16	Spring break. Enjoy!!	
March 21/23	7.1 & 7.2 Probability & Addition Rule for Prob.	
March 28/30	7.3 & 7.4 multiplication rule & Counting (combinations and Permutations) 7.5. (as needed)	
April 4/6	Test 3 / 1.1 Data graphs	Test 3: 4/4/22
April 11/13	8.1 Measures of Center 8.2 measures of dispersion	
April 18/20	8.3 Measures of relative position, 8.4 Normal Curve	
April 25/27	8.5 Standard Curve	Test 4: 4/27/22
May 2/ 4	Last week of class: review for final/practice Final made available	
May 9/10	"Reading days"	
May 16	Final Exam 10:30-1:15 pm	

Any additional quizzes: see next page:

We will discuss in class, well in advance! ☺