Math 106- 005 Spring 2021 Syllabus **Instructor:** Susan Calderon
Meeting Times: T/Th, 9:00-10:15am

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 106-005," followed by **your** first & last name in the subject line.

Office hours: T/TH, after class or by appointment

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: Thursday, May 6, due by 10:15am

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

Grading: Your grade will be weighted as follows:

106-005 -Quantitative Reasoning work:	Overall % of your final grade
2 Handwritten assignments*	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%

*any hand-written assignments will be done through Gradescope. We will discuss this in class.
They will be available on Sundays and must be submitted on Bb by 11:59 pm the following Friday (=night time). I will announce when I assign these.

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/

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 12:00 pm the day of the next class.

Tentative Schedule Outline:

CLASS MEETINGS	TOPICS COVERED	NOTES
Jan. 26/28	1.3 and 2.1 Estimates, Set notation	
Feb. 2 /Feb 4	2.2 & 2.3 Subsets, Venn and Set operations	
Feb. 9/Feb. 11	2.4 Applications and Surveys, 3.1 (?)	*Feb.12 11:59pm
Feb. 16/18	3.1 & 3.2 Logic, negations, truth tables	
Feb. 23/25	3.3 Logical equivalence and De Morgan's	
March 2/4	4.1 Rates & 4.2 Ratios	Test 1 due 3/2, 12:00 pm
March 9/11	4.3 & 4.4 Proportions & Percentage problem	
March 16/18	7.1 & 7.2 Probability & Addition Rule for Pro	*March 19, 11:59pm
March 23/25	7.3 & 7.4 multiplication rule & Counting (combinations and Permutations) 7.5. (as needed)	Test 2 due 3/23 12:00 pm
March 30/ April 1	1.1 Data graphs, 8.1 Measures of center	
April 6/8	8.2 Measures of dispersion, some 8.3	Test 3 due 4/6, 12:00pm
April 13/15	8.3 Measures of relative position and 8.4	
April 20/22	8.5 Normal Distribution, Review	
April 27/29	Last week of class: practice final available any uncovered material and review	Test 4 due 4/27, 12:00 pm
Tuesday May 4	Available for office hours	
May 6	Final exam online, due by 10:15 am	

*Tentative dates for non-online HW to be handed in via Gradescope We will discuss this in class, well in advance! ☺