

OUT OF CLASS LEARNING:

You have support after class through the Hawkes Learning system, well as office hours.

EMAIL: scalder1@gmu.edu - I answer emails once a day (Monday – Friday). When emailing me, put MATH 106-001 followed by **your** first & last name in the subject line.. This general rule should be used with ALL emails you send –. I do not open or respond to emails without this information.

Office hours: M 2:00pm-3:00pm & W 10:30am-11:30am

Text: Viewing Life Mathematically by Denley. This semester we are piloting a new system. Please use the free two week trial when you start using this system just in case after a week you decide to change sections. Follow prompts for HAWKES on Blackboard.

Calculators: You will be required to have a calculator for the course with an e^x function and factorial function (!). We are recommending the TI-83/84 (ONLY IF YOU HAVE ONE ALREADY)or TI-30II.

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.

- **Final Exam In Person: Monday, May 11 7:30-10:15 am, in our classroom**

Tests must be taken on these dates. NO make-up tests will be given.

Grading: Your grade will be weighted as follows. On Hawkes, your quizzes will be 50% of your grade, and your homework will be 50% of your grade. No tests will be dropped.

Assignment	Weight	Grade	Weight x Grade	Running average
paper quiz	5%			
Class Collaboration	5%			
In person Test 1	20%			
In person Test 2	20%			
Hawkes HW (Certify & quizzes)	25%			
Final Exam	25%			

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 Boards: I will make the discussion board available as an experiment. Let's see how it goes. Make sure you post under the correct forum and either reply to an existing thread or create a new one with a meaningful subject line indicating the unit/ chapter/ section or topic you are discussing. Your post can show your work, ask a question or answer a question. Feel free to include drawings, colors, tables, descriptions of your thought process. If you have a question, one of your classmates may have an answer. I will check the board once a day M-F.

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 Stepby-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.

Tutoring Center: The Math Tutoring Center is located in the Johnson Center Room 344. Help is available on a walk-in basis. 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. Being present in class is the best way to know exactly where we are and when the next test is. I will announce an upcoming test one week before we have it.

M/W Class	Wk	Topics	Available	DUE DATES	notes
Prerequisite	0	How to use Hawkes	Now	Wednesday Jan 22	Prerequisite due before 9AM day 1
Jan 22	1	1.3 Estimating and Evaluating	Now	Fri Jan 24	
Jan 22	1	2.1 Set Notation	Now	Fri Jan 24	
Jan 27	2	2.2 Subsets and Venn Diagrams	Now	Fri Jan 31	
Jan 29	2	2.3 Set Operations	Now	Fri Jan 31	
Feb 3/5	3	2.4 Applications & Survey Analysis	Now	Fri Feb 7	Cumulative Quiz this week Weds, 2/5
Feb 10	4	3.1 Logic Statements and Their Negations	Fri Feb 7	Fri Feb 14	

Feb 12	4	3.2 Truth Tables	Fri Feb 7	Fri Feb 14	
Feb 17	5	3.3 Logical Equivalence and De Morgan's Laws	Fri Feb 14	Fri Feb 21	
Feb 19	5	3.4 Valid Arguments and Fallacies	Fri Feb 14	Fri Feb 21	Test this week. Will be announced ahead of time
Feb 24/26	6	4.1 Rates and Unit Rates	Fri Feb 21	Fri Feb 28	
Feb 24/26	6	4.2 Ratios	Fri Feb 21	Fri Feb 28	
Feb 24/26	6	4.3 Proportions and Percentages	Fri Feb 21	Fri Feb 28	
Feb 24/26	6	4.4 Using Percentages	Fri Feb 21	Fri Feb 28	
March 2	7	7.1 Introduction to Probability	Fri Feb 28	Fri March 6	
March 4	7	7.2 Counting	Fri Feb 28	Fri March 6	Quiz online, then Spring Break 😊
March 16	8	How to Critique a Published Study	Fri March 6	Fri March 20	
March 18	8	8.1 Collecting Data	Fri March 6	Fri March 20	
March 23	9	8.2 Displaying Data	Fri March 20	Fri March 27	
March 25	9	8.3 Describing and Analyzing Data	Fri March 20	Fri March 27	
March 30	10	8.4 Normal Curve	Fri March 27	Fri April 3	

April 1	10	8.5 Analyzing Graphs	Fri March 27	Fri April 3	Test: Announced ahead of time
April 6	11	9.1 Personal Finance	Fri April 3	Fri April 10	
April 8	11	9.2 Interest	Fri April 3	Fri April 10	
April 13	12	9.3 Saving Money	Fri April 10	Fri April 17	
April 15	12	9.4 Borrowing \$	Fri April 10	Fri April 17	Quiz online
April 20,22 April 27,29	13&14	Unfinished material and final exam review	Fri April 17	N/A	
May 11, Mon.			N/A	N/A	Final EXAM 7:30 – 10:15 AM