

Math 106 Section 12 (3 Credits) Spring 2022 Syllabus

Class Location: Exploratory Hall L111

Class Time: W 7:20-8:35pm

Instructor: Dr. Sam Ferguson

Email: sfergus@gmu.edu

Office: Exploratory Hall 4309

Office Hours: W 8:35-10:35pm,
unless otherwise announced.

Hybrid or Flipped Class – What is that? This class is designed as a hybrid class, which means that half of the time you normally spend in the classroom is being replaced by online lecture and learning resources. Having lecture outside class and doing problems in class is referred to as the flipped classroom pedagogical model. You will have support after class through the Hawkes Learning system, as well as office hours and some videos created based on frequently missed problems. There are also videos available on Blackboard made by other Math 106 instructors here at Mason.

Email: I answer emails once every 24 hours, Monday–Friday, excluding weekends, holidays, and spring break. Please communicate through GMU emails only. When emailing me, or any professor, provide the name of the course you are enrolled in within the subject line. You also need to include YOUR first and last names in any email you send. I do not respond to emails without this information. More info on student privacy and student rights under FERPA here: <https://registrar.gmu.edu/ferpa/>.

Text/Online learning system: Viewing Life Mathematically (Custom for GMU) by Denley. Please use the free trial when you start using this system just in case after a week or so you decide to change your plans. Follow prompts for **HAWKES** on Blackboard.

Equipment: INTERNET, COMPUTER, EXCEL, Calculators, white board marker(s): Since this course is taught half online you will need access to a computer with reliable internet. For the class collaboration you will need a dry erase marker. You will want to have a calculator with an e^x function and factorial function (!). We are recommending the TI-83/84 (ONLY IF YOU HAVE ONE ALREADY) or TI-30II. You will also be prompted to use excel for some more involved calculations. If you do not have the Microsoft Office here is a link to get it free: <https://its.gmu.edu/knowledgebase/how-to-install-microsoft-365-apps-for-enterprise-on-your-computer/>

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.

This course will introduce the following material: Rates, Ratios, Percentages, Counting Techniques, Probability, Statistics, Sets, and Logic.

Required Attendance: Attendance in person is required on April 6 for Test 2 and May 11 for the Final Exam. If you cannot attend one or both of these, then you must notify me by email no later than February 1. If you do not email such a notification by 11:59pm on February 1, this is equivalent to a binding agreement that you will attend class on these days. Exceptions are granted at instructor discretion for well-documented emergencies.

Grading weights:

Items in Green are submitted on Blackboard. Items in Blue are in Hawkes or in person.

Assignment	Weights
Syllabus Quiz due January 24	5%
Time Management Assignment (Calendar) due February 16	5%
Average of 3 Tests (1 st and 3 rd tests are online and the 2 nd is in person on April 6)	45%
Hawkes Certify (50%) & Quizzes (50%)	25%
Final Exam (in person) Wednesday, May 11, 7:30-10:15 PM (This will not be finalized until sometime during week 3.)	20%

The grading scale will be: A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%; F: below 60%. + or – may be used for grades in the top/bottom 2% in each range at instructor discretion.

Class Prep and Class Collaboration: Class preparation will ensure you get the most out of class time. One part of the class prep for this semester is doing the daily COVID health check. You may need to show this when you enter the room. Sometimes the prep will include working in the Learn mode on Hawkes, and it may be to bring notes or hand-written definitions to class. The prep work will be sent in announcements and listed on Blackboard. Class collaboration will involve working problems together in class. Although these activities are a lot of fun, please don't come to class ill.

HOW TO USE HAWKES Each lesson of the software offers three modes:

Learn is an interactive presentation of the material found in your textbook and includes instructional video clips and example problems. Skipping this portion is equivalent to skipping classes. DO NOT SKIP THIS.

Practice gives you access to unlimited practice problems, provides error-specific feedback for commonly made mistakes, hints for 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.

Certify is the graded homework portion of the lesson. After answering the set of questions without exceeding the number of available strikes (or lives), you will receive a perfect 100% score for your homework. If you are not able to Certify in your attempt, then you are able to start a new set of questions from the beginning without 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 Certify credit before the due date.

Late Certify assignments will be accepted for partial credit. 10% deduction for up to 2 days late, 20% for up to 7 days late, 30% for up to 21 days late and 40% deduction for anything later than 21 days through the day before the final exam is due.

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. Additional videos at www.hawkestv.com.

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.

Diversity, equity and inclusion: George Mason University is an intentionally inclusive community that promotes and maintains an equitable and just working 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. My preferred pronouns are he/him/their/theirs.

Disability statement: If you are a student with a disability and you need academic accommodations, please contact Disability Services at 703.993.2474. All academic accommodations must be arranged through that office. Your accommodations sheet is required to be submitted on Blackboard no later than February 1 if you are requesting accommodations for a disability. You can access this sheet at the <https://ds.gmu.edu/> website. If you do not submit an accommodation sheet by 11:59pm on February 1, this is equivalent to a binding agreement that you do not need any academic disability accommodations for the duration of this course.

GMU Math Tutoring Center: The Math Tutoring Center will be offering 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-centerhours-and>

University Honor Code: You are expected to follow the GMU Honor Code <https://oai.gmu.edu/>

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-supportresources-on-campus/>

Please find the time management assignment (calendar), which is a schedule of graded items. On Blackboard you will find an active link so that you can edit this calendar as you progress through the course. Editing this will be part of your time management assignment. It is meant as a tool to help you stay on track.