# Syllabus 

| INSTRUCTOR | Calvin Stanley <br> 4309 Exploratory Hall <br> Email: cstanle@gmu.edu |
| :--- | :--- |
| OFFICE HOURS | $1: 00-3: 00$ pm, Monday and Wednesday |
| LECTURE ROOM | Enterprise Hall Room 276 |
| MEETING TIME | $9: 00-10: 15 \mathrm{am}$, Tuesday and Thursday |

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.

Goals The course seeks to accomplish the following goals:

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.

If you have any trouble registering for the class, email Christine Amaya at camaya@gmu.edu.

## Required Materials:

1. Access code for the ebook and MyMathLab for Mathematical Ideas, 13th ed. by Miller, Hereen, and Hornsby.

OR

Mathematical Ideas, 13th ed., plus a NEW MyMathLab registration code.
Online course ID is: stanley 40526
2. Calculator: You will need a simple scientific calculator for this class. No advanced scientific calculators, graphing calculators, or any calculators that can perform integration/differentiation are allowed. I recommend a TI-30X IIS.
3. A GMU email address and access to it. I will only respond to emails from a student's GMU email to ensure student privacy.
4. Access to Blackboard. I will be posting assignments and grades here, so it is in your interest to check frequently.
5. Regular and consistent access to a computer. I will not be assigning work via MyMathLab, but I will be posting materials to Blackboard.

Assessment The point breakdown for the class is shown below:

$$
\begin{array}{rrl}
\text { Daily quizzes } & 3 & \text { points each } \\
\text { Seven homeworks } & 20 & \text { points each } \\
\text { Three midterm exams } & 100 & \text { points each } \\
\text { One final exam } & 200 & \text { points } \\
\text { Total } & 715 & \text { points. }
\end{array}
$$

I will be grading the class according to the following scale:

|  |  | A: | $650-715$ | A-: | $620-649$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{~B}+:$ | $591-619$ | B: | $563-590$ | B-: | $534-572$ |
| $\mathrm{C}+:$ | $505-533$ | C: | $460-504$ |  |  |
| $\mathrm{D}+:$ | $434-459$ | D: | $391-433$ |  |  |
|  |  | F: | $000-390$ |  |  |

Attendance/Quizzes Attendance is required to each class in order to gain a proper understanding of the material. The daily quizzes serve as a way to measure attendance. The quizzes are open note, and you are encouraged to work with classmates on them.

Homework There will be seven homework assignments given throughout the semester. Each will be worth 20 points. Four problems assigned at the beginning will be graded, and the others are extra practice. You are strongly encouraged to do the additional problems, however, in order to gain a good understanding of the material. Assignments are to be turned in by the specified date in class. If submitting on separate notebook paper, remove the fringe edge to receive a grade. Solutions are to be written by hand, and with all work shown and written in a clean, organized manner. You only need to turn in work for the four graded problems, and working on the others will not earn you extra credit.
You may work with other students on the homework assignments, however you may not use solution sites such as Chegg or Slader. These sites will more often than not use a technique we have not covered in class, or are sometimes flat out wrong. It is therefore in your best interest to avoid them.

Exams There will be three midterm exams throughout the semester. Tentatively they will be on $9 / 19$, $10 / 29$, and $11 / 21$. There will also be a cumulative final exam on Thursday, $12 / 12$, from 7:30 am to 10:15 am.

Late/Makeup Work Any homework assignment may be turned in by the class period after the due date for half credit. After that, I won't accept late work. I must know at least a week in advance if you cannot attend class the day of an exam in order to schedule for you to take an alternate exam early. If you miss class due to illness, I require that you email me before class letting me know ahead of time, as well as a signed doctor's note in order to excuse the quiz for that day, or find a time for you to take a makeup exam.

Additional Resources In addition to class time, the math tutoring center is located in the Johnson Center Room 344. Help is available on a walk in basis. See http://math.gmu.edu/tutor-center.php for hours of operation.

## Academic Dishonesty and GMU Honor Code

You are expected to comply with the university's honor code found at the Honor Code Policy Site.
Some, but not all, examples of behaviors considered cheating include:

- Any form of communication with another person during an assessment
- Copying material from another person from any graded assignment
- Allowing another person to copy from any graded assignment
- Use of unauthorized assistance on any graded assignment
- Providing or receiving a copy of a quiz or exam used in this course
- Use of a cell phone during an exam.

Accommodations If you have a learning or physical difference that may affect your work, please contact the Office of Disability Services (ODS) and arrange accommodations through them. Either email or hand me a copy of the notice in class.

Tentative Schedule for Material

| Week | Topics Covered | Sections Covered | Assignments |
| :---: | :---: | :---: | :---: |
| 1 | Class introduction <br> Inductive/Deductive Reasoning Problem Solving and Sets | 1.1, Chapter 2 | Homework 1 Assigned 8/27/19 |
| 2 | Set Theory | Chapter 2 | Homework 1 Due 9/5/19 Homework 2 Assigned 9/5/19 |
| 3 | Logic | Chapter 3 |  |
| 4 | Logic | Chapter 3 | Homework 2 Due 9/17/19 Exam 1 9/19/19 |
| 5 | Decimals, Percent, and Begin Counting | 6.5 , Chapter 10 | Homework 3 Assigned 9/24/19 |
| 6 | Counting and Begin Probability | Chapter 10, 11 | Homework 3 Due 10/3/19 Homework 4 Assigned 10/3/19 |
| 7 | Probability | Chapter 11 |  |
| 8 | Probability | Chapter 11 | Homework 4 Due 10/17/19 Homework 5 Assigned 10/17/19 |
| 9 | Statistics | Chapter 12 | Homework 5 Due 10/29/19 Exam 2 10/29/19 |
| 10 | Statistics | Chapter 12 | Homework 6 Assigned 10/31/19 |
| 11 | Algebra Review and Regression | 7.1, 7.2, Chapter 12 |  |
| 12 | Financial Math | 13.1 | Homework 6 Due 11/12/19 Homework 7 Assigned 11/12/19 |
| 13 | Financial Math Elementary Cryptography | Chapter 13 | Exam 3 11/21/19 |
| 14 | Elementary Cryptography |  |  |
| 15 | Elementary Cryptography |  | Homework 7 Due 12/5/19 |

