Math 111, Section 3, Fall 2022

Linear Math Modeling
In-Person Instruction @ Loudoun Campus

Instructor: Deodato Obregon

E-mail Address: dobrego@gmu.edu

Class Hours: Wednesdays, 4:30pm to 7:10pm, Room 211 @Loudoun Campus
Office Hours: Saturdays 1 to 2 pm (zoom), Mondays 6 to 7 pm (zoom)
and in-person by appointment

Credit Hours: 3

Textbook: *Finite Mathematics and Its Applications, 13e, by Goldstein, Schneider, Siegel, and Simmons*

MyLab Math access for Math 111 is required for each student.
The online textbook is included with your MyLab Math subscription.
Instructions regarding MyLab Math will be posted in Blackboard.

Course Description: This course meets the quantitative reasoning requirement, one of the Foundation requirements of the Mason Core. 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. We will cover the following topics:

Linear Equations and Graphs
Linear Systems and Matrices
Leontief_Input-Output Analysis
Markov Processes
Data Fitting - Polynomial Interpolation, Least Squares

Disability Services: If you are a student with a disability and you need academic accommodations, you must inform me by e-mail and the Office of Disability Services (phone: 7039932474). All academic accommodations will be arranged through that office.

Diversity/Inclusion Statement: George Mason University welcomes and values individuals and their differences including race, economic status, gender expression and identity, sexual orientation, ethnicity, national origin, first language, religion, age, and ability status.

Main Course Policies:

- **Every student is expected to attend the scheduled class lectures.**
  Cellphones must be kept in silent mode and out of sight during class.
  Laptops/chromebooks can be used in class when permitted by the instructor.
- A PDF document for guided notes for each lecture will be posted on Blackboard.
  Use these guides to actively take notes during the lecture.
  Class worksheets (graded) will be provided to students during each class.
- All exams must be taken inside our classroom during the given schedule.
  In general, **no make-up exam will be given** unless there is an extremely unusual event as verified by the instructor. The instructor reserves the right to give a score of 0 for any missed exam.
- **All students are responsible for all communication, assignments, and assessments** in this course. They will adhere to the University Honor Code.

University Honor Code:

https://oai.gmu.edu/mason-honor-code/full-honor-code-document/

No collaboration is allowed on exams. Any indication that you used a non-permitted device or resource, copied or allowed someone to copy your work and answers is a violation of the GMU Honor Code. The course assignments are designed for individual completion, not for group work. You are not allowed to share or post any notes, worksheets, assessments, or other resources from this course on websites. Any Honor Code violation will be reported to the Office of Academic Integrity.

Important Dates

Exam 1 (1.1, 1.2, 1.3, 1.4, 2.1): September 14, 2022
Exam 2 (2.2, 2.3, 2.4, 2.5, 2.6, 8.1, 8.2): October 26, 2022
Exam 3 (comprehensive final): December 7, 2022
Last Day to Drop (with no tuition penalty): September 6, 2022
Last Day to Drop (50% tuition refund): September 13, 2022
Unrestricted Withdrawal Period (no refund): September 14 to 27, 2022

Grade Distribution:

Assignments (see below)	25%
Exam 1 (1.1 to 1.4, 2.1)	20%
Exam 2 (2.2 to 2.6, 8.1, 8.2)	25%
Exam 3 (cumulative final)	30%

The assignments include MyMathLab (MML) homework, data fitting assignments using Desmos and matrix calculator outputs, and graded classwork (written work). If students miss a class, they will get 0 out of 10 points allotted to the classwork. MyMathLab homework is graded for accuracy and 5 attempts are given to answer each MML homework item. There is a 20% late penalty for each homework submitted within 1 week after the deadline. After this time, homework will not be accepted. Exam 1 Prep HW and Exam 2 Prep HW are timed (test format) and you get 3 test attempts with your highest score recorded. All exams have two parts: MyMathLab component and problem solving (written work).

Grading Scale

A+: 98 – 100; A: 93 – 97; A-: 90 - 92; B+: 87 – 89; B: 83 – 86; B-: 80 - 82; C+ : 77 – 79; C: 73 – 76; C-: 70 - 72; D: 60 - 69; F: 0 – 59.

Technology and Resources

- MyMathLab (MML) is an excellent tool for active learning. You get immediate feedback when you attempt the HW items. There are tools and student resources in MML that will help you master the material.

- Desmos is a free online resource that we will use for graphing models and making scatter plots of data sets. It also has many other useful features. A Data Fitting Text resource will be used for the last unit.

- Either Matlab or another matrix calculator (like Desmos) is useful for matrix calculations. Matlab is available for student use remotely on mason.gmu.edu. The system requires your PatriotPass.

- Bring a laptop/chromebook to class during exams.
  E-mail the instructor soonest for any device-related issues.

- Any scientific calculator or one that does arithmetic and exponential calculations is generally acceptable. Some matrix computations on exams are to be done by hand using the methods taught in class.

Class Web Page / Communication

- I will post announcements, class materials, links and resources, and official scores/grades on **Blackboard**. I will also send information via **email**. E-mail is the primary way of reaching me: **dobrego@gmu.edu**. Please include your full name and Mason ID in your e-mails.

Math Help

- I will work with you to help you achieve success and overcome difficulties in this course. You are encouraged to attend any of the office hours to clarify topics or to get help with some homework items after you have attempted the items and used MML help tools.

- You may also get math help from The Math Tutoring Center staff. All Math Help Information are posted in our corresponding Blackboard tab.

Final Note

- This 3-credit math course will require a substantial amount of **your time and effort**. You are encouraged to participate actively in class and to practice outside of class. Feel free to share your ideas to solving a problem. **Preparation is the key to your success!** Be persistent and positive. Get math help when needed. Have a productive and enjoyable semester!