

# Math 111, Section A02, Summer 2023

# **Linear Math Modeling**

Distance Education

**Instructor:** Deodato Obregon

E-mail Address: dobrego@gmu.edu

Class Hours: Asynchronous Online

**Office Hours:** Mondays, Tuesdays, Thursdays, Fridays 5 to 6 pm (zoom)

or by appointment

**Credit Hours:** 4

**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:

Review of Algebra Linear Equations and Graphs Linear Systems and Matrices 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 watch the lesson videos posted for each week.

  Follow the recommended weekly timeline for the specific textbook sections and topics.
- A PDF document for guided notes for each lecture will be posted on Blackboard. **Use these guides to actively take notes while watching the videos.** Practice worksheets and keys will be provided for each topic.
- All exams must be taken by zoom proctoring during the given schedule. Contact the instructor before May 26 if you have any issue with the schedule. In general, **no make-up exam will be given** unless there is an extremely unusual event as determined and 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 external websites. **Any Honor Code violation will be reported to the Office of Academic Integrity**.

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### **Important Dates**

Exam 1: May 31, 2023 Exam 2: June 14, 2023 Exam 3: June 23, 2023

Exam Time: 6:00 pm to 8:30 pm via Zoom

Last Day to Drop (with no tuition penalty): May 24, 2023 Last Day to Drop (50% tuition refund): May 30, 2023

Unrestricted Withdrawal Period (no refund): May 31 to June 6, 2023

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**Grade Distribution:** Assignments (see below) 20%

Exam 1 (1.1 to 1.4, 2.1) 25% Exam 2 (2.3 to 2.5, 8.1 to 8.3) 25% Exam 3 (cumulative) 30%

The assignments include MyMathLab (MML) homework, data fitting assignments using Desmos and matrix calculator outputs, and written work (including spirals). 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 MML homework submitted within 3 days after the deadline. After this time, MML HW 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.

## **Grading Scale**

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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.
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## **Technology and Resources**

- MyMathLab is an excellent tool for active learning. You get immediate feedback when you attempt the HW items. There are help tools in MML that will help you learn the material and practice for mastery.
- 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.
- You will need a desktop/laptop and a stable internet connection. During exams proctored via zoom, you will also need a cellphone with camera.
- 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 scores/grades on **Blackboard**. The Blackboard gradebook is our official gradebook, not MyMathLab. I will also send information via **GMU email**. E-mail is the primary way of reaching me: <a href="dobrego@gmu.edu">dobrego@gmu.edu</a>. Please include your full name and Mason ID in your e-mails.

## Math Help

- The instructor will work with you to help you achieve success and overcome any challenges 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.

#### **Final Note**

• This 4-credit math course will require a substantial amount of your time and effort. Completing this course in 5 weeks can be overwhelming. If you cannot commit enough time and energy to study and practice daily, it is better to take this course during the Fall or Spring semester. Be persistent and positive. Get math help when needed and use our Blackboard resources. Have a productive and enjoyable summer session!