

MATH 111-001 and DL1 Linear Math Modeling

Asynchronous Fall 2022 ~ 3 credits

Quick View Syllabus (For Full Syllabus see PowerPoint Syllabus)

Instructor: Pam Yusko **Class Time:** Asynchronous

Email: <u>pyusko@gmu.edu</u> (Please include your name and Math 111 in all emails.)

In-person Office Hours: Monday/Wednesday 9:15 – 10:15

Tuesday 12:15 – 1:00

Office: 4221 Exploratory Hall

Zoom Office Hours: email to make an appointment

Communication: Harmonize on Blackboard: we will communicate with each other and classmate using

Harmonize.

Text and Materials: Online Software and e-textbook through MyLabsMath (Instructions on Blackboard)

<u>Finite Mathematics and Its Applications</u>, *13th Edition*, by Goldstein, Schneider and Siegel, Pearson 2018 **with MyLab Math.** The online textbook is included with your Pearson

MyLab Math subscription.

Other Technology:

- *MyLabMath* is for online homework that also contains the online textbook. *Matlab* to help with matrix calculations. This software is available for student use remotely on mason.gmu.edu. The system requires your PatriotPass. Details for connecting is available on Blackboard.
- *Desmos* is a free software that we will use for graphing models and making scatter plots of Data Sets
- Math 111 Data Fitting Textbook will be available on Blackboard
- Calculator for class work, homework, and exams. Any calculator that does arithmetic and exponential calculations is acceptable. Matrix computations on exams and worksheets are to be shown.

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
- Linear Systems and Matrices
- Leontiff Input/Output Analysis
- Markov Processes
- Data Fitting Polynomial Interpolation, Least Squares

Grading:

Your grade for the course will be calculated based on MyLabMath Assignments, Data Fitting Assignments, Class Worksheets, two Exams, and a Final Exam. The point values are an estimate and may change.

- 200 points Pearson MyLabMath Assignments and Data Fitting Assignments
- 300 points Quizzes
- 300 points two exams (100 points each) and the final exam (150 points)

A: 90-100 B: 80-**89.9** C:70-**79.9** D:65-**69.9** F: below 65

+ or - may be attached to the grade for the upper or lower 2 points in each range

Exams:

• Exam 1: TBA (week of Sept 19 – 25)

• Exam 2: TBA (week of Oct 24 – 30)

• Final Exam: TBA (week of Dec 7 – 14)

MAKE-UP Exams:

If you miss an exam, contact me ASAP. Makeup exams will only be given under extreme circumstances.

Assignments/Quizzes:

Homework practice problems will be assigned for each section. Watching the video and reading the sections of the text related to the problems is a part of the homework assignment. Weekly assignments will be posted on Blackboard "Learn Here: Weekly Lessons". Homework assignments and quizzes will be due Sunday night at 11:59 pm.

Student Expectations:

- Follow along on Blackboard with "Learn Here: Weekly Lessons"
- Read the online Pearson MyLabMath (MLM) textbook and the Data Fitting Textbook.
- View the PowerPoints.
- Take notes "Blank Notes to Print" will be available on Blackboard. Print these and take notes as you watch the section videos that are found on Blackboard.
- Preparation- you are expected to be prepared for class by reading sections, taking notes, and doing homework assignments and quizzes
- Check Blackboard regularly for announcements
- Meet deadlines for quizzes and homework assignments in MyLab Math (MML) and Matlab.
- Get help when needed.
- Stay Positive and Work hard (3)

Honor Code:

Sharing information of any kind about exams is an Honor Code violation. The assigned Matlab problems are NOT GROUP PROJECTS. Each student is to work independently and turn in their own Matlab calculations. Some kinds of participation in online study sites violate the Mason Honor code: these include accessing exam or quiz questions for this class; accessing exam, quiz, or assignment answers for this class; uploading of any of the instructor's materials or exams; and uploading any of your own answers or finished work. Always consult your syllabus and your professor before using these sites. Any violations will be referred to the Office of Academic Integrity.

Disability statement:

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services at 703-993-2474. All academic accommodations must be arranged through that office.

General Remarks:

I am here to help. If there is anything that you have trouble with just let me know. I can try to help over email or I can meet on Zoom. I will structure and organize the course with weekly units on Blackboard to make it easier for you to follow. Be aware deadlines. Keep on top of the class and try not to get behind. Get help as soon as possible.

Mason's Nondiscrimination Policy:

George Mason University is committed to providing equal opportunity and an educational and work environment free from any discrimination on the basis of race, color, religion, national origin, sex, disability, veteran status, sexual orientation, or age. Mason shall adhere to all applicable state and federal equal opportunity/affirmative action statutes and regulations. Moreover, in this class we seek to create a learning environment that fosters respect for people across the entire range of human identities. We encourage all members of the learning environment to engage with the material personally, but to also be open to exploring and learning from experiences different than their own.

In this class we are tolerant of all people and the differences that make us all unique.