MATH 111 Linear Math Modeling

Section DL1/DP1

Spring 2022

(Asynchronous Classroom – Self-Paced)

All links are on Blackboard.

Instructor Information:

Professor Pam Yusko

- **E-mail:** pyusko@gmu.edu
- **Mathematical Sciences Department**: 703-993-1460
- **Office:** 4221 Exploratory Hall
- **In-PersonOffice Hours:** Monday/Wednesday 10:45 am – 11:45 am
  Tuesday 10:30 am – 11:30 am

- **Zoom Office Hours:** Send an email to schedule online Zoom office hours.

Professor Pam Yusko's Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30 - 10:20	MATH 105 (001) 1014 Horizon Hall		MATH 105 (001) 1014 Horizon Hall		
9:00 - 10:15		MATH 271 (001) 215G Innovation Hall		MATH 271 (001) 215G Innovation Hall	
E-mail me to schedule Zoom office hours.	In Person Office Hours 10:45 - 11:45 Exploratory Hall 4221	In Person Office Hours 10:30 - 11:30 Exploratory Hall 4221	In-Person Office Hours 10:45 - 11:45 Exploratory Hall 4221		
12:00 - 1:15	MATH271 (004) 3008 Horizon Hall		MATH271 (004) 3008 Horizon Hall		
	MATH 111 Asynchronous	MATH 111 Asynchronous	MATH 111 Asynchronous	MATH 111 Asynchronous	MATH 111 Asynchronous

MATH 111 Linear Mathematical Modeling

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
- (3 credits)

Prerequisite:

Score of 75 on the Pre-Algebra section of the Math Placement Test.

(Note: Math 110 is NOT a prerequisite for Math 111)

ALEKS e-Textbook and Software (This can be found on Blackboard)

e-Textbook:

Finite Mathematics and Its Applications, *12th Edition*, by Goldstein, Schneider and Siegel, Hair Pearson 2018 **with MyLab Math access code**: yusko00513

Required Supporting Software for homework and e-textbook:

The online textbook is included with your MyLab Math subscription. Instructions for Registering are on the Tech Tools page on the left menu. The course ID is: yusko00513

Course Material

Technology:

MyLabMath is for online program that contains the online textbook and homework. The course ID for Math 111 is: yusko00513

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

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 **done by hand**.

Webcam on your computer or phone with a microphone for ZOOM Office Hurs

Suggested Class Materials:

*3-ring binder for notes
*Printer to print “Blank Class Notes to Print” found in Blackboard
OR
Computer or Tablet to open “Blank Class Notes to Print” to take notes.
*pencils and erasers

Student Expectations

- Keep a positive attitude!
- Stay on track following the Tentative Schedule
- Read the online textbook.
- Read the PowerPoint Slides
- Watch the Section Recordings and Take notes – “Blank Notes to Print” will be available on Blackboard. Print these before watching the Videos on Blackboard to follow along with the lesson and add your own notes.
- Preparation- you are expected to be prepared for class. The preparation includes doing homework problems, watching videos, and reading the textbook.
- Check Blackboard regularly for announcements and assignments.
- Meet deadlines for assignments in MyLab Math and Matlab. I will post reminder announcements for these deadlines.
- Submit Worksheets to Gradescope.

Attendance Policy:

- Classes will be Asynchronous – Self-paced.
- Attendance is not taken.

Class Grading Scale

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

- 200 points - MyLabMath Assignments and MatLab Assignmennts
- 225 points - Class Worksheets
- 400 points - three exams and the cumulative final exam (100 points each)

Your grade will be calculated out of 100%

- A = 90% -100%
- B = 80% - 89.9%
- C = 70% - 79.9%
- D = 65% - 69.9%
- F = Below 65% (Also for Cheating)
- I = Incomplete
- W = Withdrawal (A reward of W after the last day to withdraw without grade penalty requires official documentation and the Dean's signature.)

+ or - will be attached (if applicable) to the grades that occur in the lower or upper 2 points of each category.

Homework Assignments:

Homework assignments will be done on MyLabsMath and MatLabs

- The problems are meant to help you achieve the learning objectives covered in class. These problems can be done over and over again until you master the material. (If you do not understand them, please arrange for help during my office hours or the GMU tutoring center.)
- Late assignments will receive half credit.
- *Refer to Blackboard for due dates*

Homework will be graded and is essential to your success.

The more you practice have the more likely you will succeed. You should spend an average of 6 – 9 hours per week outside of class (3 hours X the number of credits) reading the textbook, going over notes, and completing homework assignments.

Class Worksheets

There will Class Worksheets that correspond to the homework sections.

- They will be done at home and submitted on Gradescope. On Blackboard, there will be information on how to use Gradescope.
- The worksheets will cover material that is contained in the homework assignments. They are similar to a quiz.
- If worksheets are submitted late, there will be 5 points deducted for each day late.

Regular Exams:

There are Two Regular Exams worth 100 points each for a total of 00 points

- The exams will contain material from the homework and the worksheets.
- Exams will be timed and submitted on Gradescope.
- **There are no makeup Exams**. You have an entire week to take an exam. You will receive a 0. For a student who misses an exam, the instructor will replace one exam score with your final exam score. (If more than one is missed, only one score will be replaced.)

Final Exam

Final Exam is cumulative and worth 200 points.

- Further details will follow on the format of the exam
- **Final Exam: TBD**

MATH 111 Top Things to Remember

1. Read your GMU emails and check Blackboard on a regular basis for announcements.
2. Include your name, MATH 111-DL1, and reason in the subject line of your emails.
3. Prepare for class by reading over your notes, reading the e-textbook, and doing the homework.
4. Come to class on time with your homework completed.
5. Find a quiet place with no distractions to do your work and attend class.
6. Silence phones during class and keep them out of sight.
7. Work hard and invest the time needed to be successful.
8. Practice! Practice! Practice!
9. Don't be afraid to get HELP!
10. YOU are responsible for the choices you make regarding your success in this class!
11. Extra credit will be given.

Important Dates to Remember

Description	Date
First Day of Class for MATH 111	Monday, January 24
Last Day to Drop with 100% Refund	Monday, February 7
Last Day to Drop (Last Day for 50% Refund)	Monday, February 14
Unrestricted Withdrawal Period	Tuesday, February 15 – Tuesday, March 1
Selective Withdrawal Period - Undergraduate Students Only (100% tuition liability)	Wednesday, March 2 – Monday, April 11
Spring Break (No Classes)	Monday, March 14 – Sunday, March 20
Last Day of Class	Saturday, May 7
Final Exam	TBD (Wednesday, May 11 – Wednesday, May 18)

Need Help?

Try the following:

1. Come and visit the instructor during office hours or schedule an appointment.
2. Look online in MyLabsMath for online help and examples.
3. Get help from the Math Tutoring Center
   https://science.gmu.edu/academics/departments-units/mathematical-sciences/math-tutoring/tutoring-center-hours-and
4. Look on YouTube
5. Ask a classmate.

MATH TUTORING CENTER

https://science.gmu.edu/academics/departments-units/mathematical-sciences/math-tutoring/tutoring-center-hours-and

Class Policies

- **Follow all direction.**

  All rules, policies, and regulations will be applied equally and fairly to all students.

- **Please show all work neatly and organized with the problems numbered.**

- **Communication via email is encouraged.**

  *The instructor will try to reply to email within 24 hours during the work week Monday – Friday at 3:00 pm. If you email over the weekend, the instructor will try to respond by noon on Monday

  *Include your name and MATH 111 and reason in your emails.

- **No Cheating!!!**

  If you are caught cheating on a test or exam or if you are caught violating the Honor Policy, then you will automatically fail the class with an “F” grade.

  The instructor will report you to the college according to official college policies and rules for further disciplinary action.

Honor Code and Academic Integrity

THIS IS IMPORTANT. It is expected that each student in this class will conduct himself or herself within the guidelines of the Honor Code. Among other things, this means that sharing information of any kind about exams or quizzes (either before or during the exam) will result, at a minimum, in a grade of zero for all parties involved. See academicintegrity.gmu.edu for a copy of the Honor Code. The right is reserved to check a picture identification during any of the exams. Internet capable devices and other electronics are not allowed to be used or within your sight during exams. This includes but is not limited to calculators, computers, cell phones, tablets and smart watches. Any of these must be turned off and put away BEFORE an exam starts. Calculators may be used on the homework or homework if necessary, but students are not to work with anyone else on quizzes.

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

COLLEGIATE COMPASION

*I believe we learn best when we can show up as whole and healthy people. To learn effectively we need to have basic security: a roof over our head, a safe place to sleep, a stable place to live, and enough food to eat. If you are struggling to meet any of these basic needs please talk to me, visit our campus food pantry https://ssac.gmu.edu/patriot-pantry/ or reach out to other Mason resources https://learningservices.gmu.edu/campus-resources/. Remember, asking for assistance and advocating for yourself is an important part of your collegiate experience. I am here to help, and **YOU** are not alone.*

ACCOMODATIONS

If you are a student with a disability and you need academic accommodations, please contact the Office of Disability Services. All academic accommodations must be arranged through that office.

I will need the form from Disability Services emailed to me ASAP.

Office of Disability Services

Student Union Building I (SUB I), Room 4205

Phone: 703.993.2474.

https://ds.gmu.edu/

DIVERSITY AT MASON

https://www2.gmu.edu/about-mason/diversity-mason

ANTI-RACISM RESOURCES

- In an effort to protect the health of our students and our staff, we offer all counseling and crisis services virtually at this time. We also offer Virtual Mental Health Workshops and Virtual Academic Success Workshops. Please see our COVID-19 page for resources on how to cope and to read our statement on COVID-19 and discrimination.
- If you wish to speak with a counselor between 8:30am-5:00pm (Monday-Friday), please call the CAPS office at 703-993-2380 and our staff will gladly connect you with a counselor over the phone.
- For mental health crises outside of business hours, please call CAPS at 703-993-2380, select option 1, to connect with an after-hours crisis counselor. For emergencies, please call 911 or go to your nearest emergency room.
- **https://caps.gmu.edu/**

Lesbian, Gay, Bisexual, Transgender, Queer, and Questioning Resourses

https://lgbtq.gmu.edu/

MORE STUDENT SUPPORT THROUGH STEARNS CENTER

https://stearnscenter.gmu.edu/knowledge-center/student-support-resources/

RELIGIOUS HOLIDAY CALENDAR

https://ulife.gmu.edu/religious-holiday-calendar/

MULTILINGUAL ASSISTANCE

https://stearnscenter.gmu.edu/knowledge-center/student-engagement-classroom-managment/teaching-multilingual-learners/

GMU ACADEMIC CALENDAR

https://www2.gmu.edu/academic-calendar#

GMU UNIVERSITY CATALOG

- For any information for the 2020-2021 school year, please refer to the University Catalog.
- https://catalog.gmu.edu/

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

THERE is a difference BETWEEN not knowing AND NOT KNOWING YET.