Math 203 A03 - Linear Algebra George Mason University Summer 2022, A Session

| Course Website: | Blackboard: https://mymason.gmu.edu/ | |
|-----------------------|---|--|
| Dates: | May 23 - June 23, 2022 | |
| Instructor: | Cigole Thomas | |
| Email: | cthoma40@gmu.edu | |
| Class Time: | MTWR 4:30 PM - 6:35 PM EDT and by appointment | |
| Office Hour Time: | MW 3 pm -4 pm and TR 7- 8 PM and by appointment | |
| Class Location: | Horizon Hall 1010 | |
| Office Hour Location: | EXPL | |

General Class Information:

Textbook: Lay, Lay, McDonald, Linear Algebra and its Applications - 6th edition, Pearson, 2021.

Course Description: This is a first semester course in linear algebra. The class covers systems of linear equations, linear independence, linear transformations, inverse of a matrix, determinants, vector spaces, eigenvalues, eigenvectors, and orthogonality. See https://cehd.gmu.edu/courses/MATH-203/ for course description.

Email Policy: You are welcome to email me or come to the office hours if you have any questions about the course material. Please note that all emails to me *must* be sent through your official George Mason University student email account. Include MATH 203 in the subject line to help me prioritize student emails and respond in a timely fashion.

Blackboard: This class will be using blackboard. All the information regarding the class including syllabus, homeworks, grades and assignments will be posted on blackboard. Regularly check your email and Blackboard for announcements.

Grading Scheme: Your grade will be weighted as follows.

| Category | Weight |
|------------------|--------|
| Homework | 25% |
| Quizzes | 15% |
| Knowledge Checks | 10% |
| Midterm Exam | 20% |
| Final Exam | 30% |

Your letter grade will be determined based on the following grading scale.

| Grade | Letter Grade |
|-----------|--------------|
| 97 - 100% | A+ |
| 90 - 96% | А |
| 87 - 88% | B+ |
| 80 - 86% | В |
| 79 - 81% | C+ |
| 70 - 76% | С |
| 61 - 68% | D |
| 0 - 60% | F |

I reserve the right to shift these gradelines lower, but they will not be raised.

Tentative Schedule: The tentative schedule for the class is attached on the last page. Please note that some part of the syllabus may be changed during the semester at my discretion due to time constraints and unforeseen circumstances. Any change to this syllabus will be announced via Blackboard announcement.

Homework: There will be four homeworks that are due on the first class of each week except the first one. See the tentative schedule on the last page for the exact dates. You are allowed to collaborate with each other and ask me questions regarding the homework but all answers should be yours.

Knowledge Checks: Starting May 25, there will be a knowledge check at the beginning of most of the lectures. These are supposed to encourage the students to read and understand the material taught in previous lecture while providing feedback to the instructor. There will be two questions- the first one will be to briefly summarize what you understood from previous day's lecture and the second question will be based on an example solved in previous class. The time limit for each knowledge check will be 10 minutes and carries a total weightage of 10%. There will be a total of 10 knowledge checks and I will drop the lowest two grades.

A guideline to prepare: Read the previous day's lecture and work out the solved examples in it by yourself.

Quizzes: You will have three 30 minute quizzes. See the schedule on the final page for exact dates. The quizzes are intended to help you prepare better for the Midterm and Final Exams. Those carry a total weigtage of 15%.

A guideline to prepare: I will assign additional questions from each section of the textbook for your practice. These will not be collected or graded, however the quiz questions will be from these pool of additional problems. Please note that these are assigned as an additional tool to help you narrow down the problems you need to solve from the textbook. You are welcome to solve all the questions if you have the time.

MidTerm Exam: The Midterm Exam will be on Monday, June 6. The duration of the exam is 90 minutes and is weighted 20% of the total grade. The tentative topics are listed in the schedule on the final page. There will not be any makeup exams without a valid documented excuse. All the exams will be closed book and closed notes.

Final Exam: The final exam cannot be taken early. You must take the final exam to pass the course. The exam will be on Thursday, June 23 from 4 : 30 pm - 7 : 15 pm. See https://registrar.gmu.edu/calendars/summer_2022/final-exams/ for the exam schedule. Unexcused absence from the final exam results in a score of F in the course per GMU final exam policy. Absence from the final exam will not be excused except for cases of extreme illness during the exam availability confirmed by physician's note or for other causes approved by the student's academic dean or director. In this case, you can request an incomplete if you are passing the course excluding the final exam.

A guideline to prepare for MidTerm and Final Exams: Study the course material taught in class. Work out the problems solved during the lecture, homework problems and as many additional problems and textbook problems as possible.

Note: You need to show full work for full credit. Just the final answer will not suffice unless specified in the exam/quiz.

Calculator Policy: Calculators are not allowed during the exams or quizzes.

Office hours: The office hours for this class are Monday, Wednesday from 3-4 pm (before class) and Tuesday, Thursday from 7-8 pm (after class). The office hours will be conducted on EXPL 4106. If you cannot make any of these times, email me and I will try to find an alternative time.

Note: You are welcome to (and encouraged) discuss anything that will affect your academic performance with me. I wish all the students to succeed in this class and will be happy to do what is in my capacity as instructor to help you learn better.

MyLab - Pearson

Accessing MyLab: Access to Pearson MyLab is **not** mandatory for this course. But if you are interested in using MyLab and the associated resources, you can use the following steps provided by MyLab to access the course.

To register for Linear Algebra:

- Go to https://mlm.pearson.com/enrollment/thomas31927.
- Sign in with your Pearson student account or create your account. Instructors, use or create a Pearson student account to register as a student. Don't use your instructor account.
- Select any available access option, if asked.
- Enter a prepaid access code that came with your textbook or from the bookstore.
- Buy instant access using a credit card or PayPal.
- Select Get temporary access without payment for 14 days.
- Select Go to my course.
- Select Linear Algebra from My Courses.
- If you contact Pearson Support, give them the course ID: thomas31927

To sign in later:

- Go to https://mlm.pearson.com.
- Sign in with the same Pearson account you used before.
- Select Linear Algebra from My Courses.

Help, Resources, and Important Information

Math Tutoring Center: You can get free tutoring for this class from the Math Tutoring Center. The math tutoring center is located in the Johnson Center Room 344. Help is available on a walkin basis hours. For hours of operation see https://science.gmu.edu/academics/departments-units/ mathematical-sciences/math-tutoring/tutoring-center-hours-and.

Accessibility: Disability Services at George Mason University is committed to providing equitable access to learning opportunities for all students by upholding the laws that ensure equal treatment of people with disabilities. If you are seeking accommodations for this class, please first visit http://ds.gmu.edu/ for detailed information about the Disability Services registration process. Then please discuss your approved accommodations with me. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu | Phone: (703) 993-2474

Technical Assistance: You have free technical support as a GMU student. For technical assistance (non-MyLab), please visit https://its.gmu.edu/service/its-support-center/. Please contact tech support for technical difficulties as I am not able to provide technical support. However, please let me know if there is any extended technical problem that you run into.

MyLab Technical Support: If you run into any problems with the MyLab system, contact Pearson https://support.pearson.com/getsupport/s/students as soon as possible. Because we are using this system for the weekly homework, it is very important to seek to resolve all technical problems in a timely manner. I am not able to provide technical support for the Mylab system, but please do let me know of any extended problem.

Counselling and Psychological Services: (703) 993-2380; http://caps.gmu.edu.

Student Conduct and Communication Policy: You are expected to abide by the GMU Student Code of Conduct: https://studentconduct.gmu.edu/university-policies/code-of-student-conduct/. You must be respectful of everyone in the course and use civil communication.

University Policies: The University Catalog, http://catalog.gmu.edu, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at http://universitypolicy.gmu.edu/. All members of the university community are responsible for knowing and following established policies.

University Honor Code: You are expected to follow the GMU Honor Code https://oai.gmu.edu/mason-honor-code/.

Important Dates: See https://registrar.gmu.edu/calendars/summer_2022/ for all important dates relevant to the Summer 2022 A Session.

- Last day to drop with no tuition liability: May 25, 2022
- Last day to drop with 50% tuition liability: May 31, 2022
- Unrestricted Withdrawal Period (100% tuition liability): June 1 June 7, 2022
- Selective Withdrawal Period (100% tuition liability): June 8 June 15, 2022

Tentative Schedule

| Date | Day | Topic (Section) | Activity |
|------------------|----------------------|-----------------------|----------------------------------|
| 23-May | Monday | 1.1, 1.2 | |
| 24-May | Tuesday | 1.3, 1.4 | |
| 25-May | Wednesday | 1.5, 1.6 | Knowledge Check |
| 26-May | Thursday | 1.7, 1.8 | Knowledge Check |
| 27-May | Friday | No lecture | |
| 28-May | Saturday | No lecture | |
| 29-May | Sunday | No lecture | |
| | | Memorial Day | |
| 30-May | Monday | No lecture | |
| 31-May | Tuesday | 1.9, 2.1 | Quiz - Chapter 1 |
| | | | Knowledge Check |
| 1-Jun | Wednesday | 2.2, 2.3 | HW Due |
| 2-Jun | Thursday | 3.1, 3.2 | Knowledge Check |
| 3-Jun | Friday | No lecture | The weage check |
| 4-Jun | Saturday | No lecture | |
| 5-Jun | Sunday | No lecture | |
| 6-Jun | Monday | 3.3 | Mid Term Exam - Chapter 1 and 2 |
| 0 V ull | monday | 5.5 | The form Exam Chapter F and E |
| 7-Jun | Tuesday | 4.1, 4.2 | HW Due |
| 8-Jun | Wednesday | 4.3, 4.4 | Knowledge Check |
| 9-Jun | Thursday | 4.5, 4.6 | Knowledge Check |
| 10-Jun | Friday | No lecture | Knowledge check |
| 10 Jun 11-Jun | Saturday | No lecture | |
| 12-Jun | Sunday | No lecture | |
| 13-Jun | Monday | 5.1, 5.2 | Quiz - Chapter 3 and Chapter 4 |
| 10 0 001 | | | Knowledge Check |
| 14-Jun | Tuesday | 5.3, 5.4 | HW Due |
| 14 Jun 15-Jun | Wednesday | 6.1, 6.2 | Knowledge Check |
| 16-Jun | Thursday | 6.3, 6.4 | Knowledge Check |
| 17-Jun | Friday | No lecture | The weage check |
| 18-Jun | Saturday | No lecture | |
| 19-Jun | Sunday | No lecture | |
| - > - 0 411 | | Juneteenth Observance | |
| 20-Jun | Monday | No lecture | |
| 20-Juli | withday | | Ouiz Chanter 5 and 6 |
| 21-Jun | Tuesday | 2820 | Quiz - Chapter 5 and 6 HW Due |
| 21-Jun 22-Jun | Tuesday Wednesday | 2.8,2.9 Review | |
| ZZ-JUII | weunesday | | |
| 22 I | TTI 1 | Final Exam, | F: 1F |
| 23-Jun | Thursday | 4:30 pm – 7:15 pm | Final Exam |

Legend Regular class No lecture Quiz/Exam