MATH203: LINEAR ALGEBRA – FALL 2025

Instructor:	Dr. Harbir Lamba
E-mail:	hlamba@gmu.edu (only email me from your official GMU email account or I will not reply).
Office:	Exploratory Hall, Room 4459
Office Hours:	Usually MW 2.45-3.15 or by appointment. I will often have extra hours on Fridays as well. I will also answer email questions any time except on the days of the tests.
Webpage:	**http://math.gmu.edu/∼harbir/m203**
Textbook:	David C. Lay, Steven R. Lay and Judi J. McDonald, *Linear Algebra and its Applications,* Sixth Edition. We will cover most of the first 6 Chapters which are the basics of linear algebra (this is your 'Learning Outcome'). Make sure you get *exactly* the correct physical copy or either of the electronic versions listed at the GMU Bookstore. There are alternative and older editions that are very similar but with different exercises! You will not be required to use Pearson MyLab Math.

Homework questions will be set after each section is completed. These will only be collected and graded four times during the semester but you are STRONGLY advised to attempt them all and write out your solutions to every question as if you were handing them in. Except for the questions that will be graded, you are encouraged to discuss these problems amongst yourselves. I will go through the majority of the homework questions in the next class and/or post solutions on the web, but you will not benefit from this unless you have attempted them properly beforehand. Note that the homework questions are the ABSOLUTE MINIMUM you should be doing each week. All of the odd-numbered questions in the book have solutions in the back and you should attempt as many of those as you feel you need to.

The course will be evaluated with 4 (1 hour) in-class tests on Wednesday September 17th, Wednesday October 15th, Wednesday November 5th and Monday November 24th. Your 3 best results will each contribute $16\frac{2}{3}\%$ towards the evaluation and 30% will come from a (cumulative) final exam on Monday December 15th at 10.30am. The remaining 20% will come from the 4 collected and graded homeworks.

The grading scale is:

A^- to A^+	70% to 100%
B^- to B^+	60% to 70%
C^- to C^+	50% to 60%
D	40% to 50%
F	0% to 40%

If you miss more than one of the in-class exams then you will need to provide very good (and fully-documented) reasons for missing each of them. Late homework will not be accepted and there will be no practice exams, make-up tests, alternative test dates, or extra-credit assignments. You are expected to abide by the University Honor Code and all suspected violations will be reported to the Honor Committee. No outside materials, calculators or notes will be allowed during any of the examinations. The graded homeworks will be hand-written and should be entirely your own work. In particular, AI is not to be used.

Additional Remarks:

1) Please ask questions in class. It makes things more interesting for everyone, myself included.

2) In addition to my office hours there is help available for this course at the Math Tutoring Centre.

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

4) It is YOUR responsibility to regularly check the course webpage http://math.gmu.edu/∼harbir/m203 and your official university email address for announcements. We will not be using Canvas in any significant way so don't look there for information during the semester.

5) Attendance at lectures is not mandatory. So if you do attend it is expected that you keep the use of all electronic devices to an absolute minimum and do not distract either me or your fellow students.

6) Finally, you are required to familiarize yourself with the Common Policies that can be found at https://stearnscenter.gmu.edu/home/gmu-common-course-policies/

Homework Questions

Section	Questions
1.1	2,3,5,11,13,21,27—34,39
1.2	1,4,9,25—38,41,43
1.3	1,5,7,8,13,19,23—32
1.4	3,4,6,10,11,14,18,23—34,41,42,45,46
1.5	2,6,17,20,27—36,38,40,41—45
1.7	2,4,6,11,21—28,37,39—44
1.8	4,5,11,16,17,21—30,34
1.9	2,3,5,8,10,18,20,23—32,44
2.1	2,7,8,10,15—24,26—32,35,36
2.2	1,5,11—20,23—28,31—36,47
2.3	6,7,8,11—30,34—36
3.1	6,11,14,19—21,25—32,39—43
3.2	2,7,17,20,24,27—34,37—42,46
3.3	4,11,18,22,29
4.1	2,4—8,11,13,21,23—32,40
4.2	2,5,13,19,25—38,40
4.3	1,3,6,8,12,15,21—33,39
4.4	1,2,5,6,9,13—20
4.5	1,3,8,10,12,17—27,29,35—37,39,43—48
4.6	1,7,8,11,12,13,14
5.1	1,4,8,10,19,21—32,34,37,40
5.2	2,3,9,10,15,19,21—30
5.3	2,3,6,7,14,19,21—35
5.4	2,4,7,10,17—25,27,28
5.5	1,2,7,8,13
6.1	2,10,14,19—28,32,34,37,39
6.2	1,2,7,8,12,15,20,23—32
6.3	1,2,4,8,14,19,21—30
6.4	3,7,10,17—22
6.5	1,3,17—26