## MATH 225: LINEAR ALGEBRA & DIFFERENTIAL EQUATIONS

Instructor:	Henry Tucker	Time:	MWF 1–1:50 pm
Email:	htucker@usc.edu	Place:	DMC 152
Office:	KAP 266C	Office Hours:	MW 4–5 pm

Fall 2023 - Section 39550R

**Course Description:** 4 Units; 3 hours lecture, 2 hours discussion. Matrices, systems of linear equations, vector spaces, linear transformations, eigenvalues, systems of linear differential equations. Prerequisite: MATH 126 or 127 or 129.

Textbook: Differential Equations and Linear Algebra, 4th ed., by Goode & Annin.

## **Discussion Sections:**

#	TA:	Email:	Time:	Place:
$39551 \mathrm{R}$	Qiyu Zhang	qiyuzhan@usc.edu	TuTh 5–5:50 pm	KAP 167
$39552 \mathrm{R}$	Qiyu Zhang	qiyuzhan@usc.edu	TuTh 6–6:50 $\rm pm$	KAP 167

## **Exam Dates:**

Midterm #1	Friday, September 22, in lecture (Week 5)
Midterm #2	Friday, November 3, in lecture (Week 11)
Final ExamW	ednesday, December 13, 11 am – 1 pm (Finals Week)

Homework: Homework problems on each week's material will be due on the following Wednesday at 11:59 pm via Gradescope.

- Each assignment will be graded by:
  - -7 points for completion, with 1 point for neatness/presentation, and
  - 3 points for correctness on 1-2 problems chosen by me.
- You are allowed to collaborate with (but not copy) other students on the homework.
- Late homework will be accepted up to **one week** after the due date for the 7 completion points.
- The lowest homework score will be dropped when calculating your final grade.

**Discussion Worksheets:** You will work together in small groups on worksheets during the Tuesday discussions. You will individually submit your worksheets via Gradescope by **11:59 pm on Tuesday** discussions.

- Each discussion worksheet will be consist of:
  - 7 points for short answer questions, and
  - 3 points for 1-2 homework type problems.

- Late worksheets will not be accepted except in extenuating circumstances. This will be at the discretion of your TA.
- The lowest discussion worksheet score will be dropped when calculating your final grade.

Quizzes: You will have a quiz during the second half of Thursday discussions.

- Each quiz will consist of 1-2 questions taken from the homework that is due the day before. Quiz questions are intended to be similar to those that will appear on the exams.
- Make-up quizzes will only be allowed in extenuating circumstances. This will be at the discretion of your TA.
- The lowest quiz score will be dropped when calculating your final grade.

Exams: Two midterm exams will be given during class on Friday of Week 5 and Week 11.

- Midterm #1 covers Chapters 2–3, Midterm #2 covers Chapters 4, 6, & 7, and the Final Exam is cumulative.
- You may use one 8.5"×11" sheet of notes (both sides), but calculators or other notes are NOT allowed.
- The discussion worksheet before each exam will be a practice exam. The format of the practice exam will be similar to the real exam.
- If your Final Exam score is higher, then it will replace the lower of your two Midterm scores.

Grading Policy: Your course score will be determined by the following weighted average:

- Homework (20%)
- Discussion Worksheets (10%)
- Quizzes (10%)
- Midterm Exams (30%)
- Final Exam (30%)

The minimum course score to **guarantee** you are assigned a given letter grade is determined by the following grading scale:

Α	A-	B+	В	B-	C+	С	C-	F
93%	90%	87%	83%	80%	77%	73%	70%	< 70%

• There will be <u>no "curve"</u> or other adjustments to any of your scores in this course. However, there is the rare chance that the overall class performance may suffer for one reason or another. Therefore, in the interest of fairness in such a situation, I reserve the possibility of lowering the above minimum scores when assigning final letter grades. Whether or not I might do this can only be determined after the final course scores are computed. I respectfully request that you do not ask me about this possibility as it will be impossible to answer until *all* of the coursework is graded.

Academic Honesty: As a student in this class it is your responsibility to complete all assignments in the manner described and to inform the instructor of suspected acts of academic misconduct by your peers. By so doing, you will not only affirm your own integrity, but also the integrity of the intellectual work of the University of Southern California, and the degree which it represents. Should you choose to commit academic misconduct in this class, you will be referred to USC Student Judicial Affairs and Community Standards.

 $\rightarrow$  <u>IMPORTANT</u>: If you are having some personal issues that are preventing you from doing well in this class, then please do not hesitate to talk to me.