Math 225: Linear Algebra & Differential Equations
Spring 2023 – Section 39557D

Instructor: Henry Tucker
Email: htucker@usc.edu
Office: KAP 266C

Time: MWF 9-9:50 am
Place: CPA 152
Office Hours: MW 2–3 pm

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.


Discussion Sections:

<table>
<thead>
<tr>
<th>#</th>
<th>TA</th>
<th>Email</th>
<th>Time</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>39558R</td>
<td>Haosen We</td>
<td><a href="mailto:haosenwu@usc.edu">haosenwu@usc.edu</a></td>
<td>TuTh 10-10:50 am</td>
<td>THH 210</td>
</tr>
<tr>
<td>39559R</td>
<td>Haosen Wu</td>
<td><a href="mailto:haosenwu@usc.edu">haosenwu@usc.edu</a></td>
<td>TuTh 11-11:50 am</td>
<td>CPA 205</td>
</tr>
</tbody>
</table>

Exam Dates:

- Midterm #1 .................. Friday, February 10, in lecture (Week 5)
- Midterm #2 .................. Friday, March 31, in lecture (Week 11)
- Final Exam .................. Friday, May 5, 8–10 am (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.
- 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. 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 on TBD during Week TBD and Week TBD.

- Midterm #1 covers TBD, Midterm #2 covers Chapters TBD, 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 your lower Midterm score.

**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:

<table>
<thead>
<tr>
<th></th>
<th>A+</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>97%</td>
<td>93%</td>
<td>90%</td>
<td>87%</td>
<td>83%</td>
<td>80%</td>
<td>77%</td>
<td>73%</td>
<td>70%</td>
<td>&lt; 70%</td>
</tr>
</tbody>
</table>

- There will be no “curve” 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.
Communication: You will use Blackboard Discussion Board for all questions pertaining to the homework and other course material. By using the Discussion Board you will be able to get answers to your questions from other students, the TAs, or me much more quickly. Furthermore, other students with the same questions will be able to see the answers. For other matters, please use email.

- **Do not email the TAs or me with math questions.** These should always be directed to the discussion board.

- **Do not use the discussion board for non-math questions.** This includes questions about grades, dates, when things will be posted, etc. These should be directed to me by email.

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.

→ **IMPORTANT:** 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.