Math 21 Linear Algebra - Summer 2023

| Instructor: Jennifer Guerrero (She/Her/Hers) | Student Hours: MWF 9:00 - 11:30 am PST Office Hours: TBA |

We will be regularly using a Canvas page for this class. Visit canvas.ucsc.edu

Lecture videos for this course will be available on Yuja via Canvas.
Student Hours will be offered on Zoom. All Zoom links will be available on Canvas.

*Every student is encouraged to attend the student hours!*

| TA: TBA | Office Hours: TBD PST |

Text: **Elementary Linear Algebra** by Bruce Cooperstein.

*Free ebook available on Canvas.*

Course Learning Objectives

A successful student in this course will...

1) Demonstrate understanding of the key topics (Systems of equations, Matrix Operations, Vector Spaces, and Linear Transformations) in Linear Algebra.

2) Enhance their problem-solving and critical thinking skills.

3) Develop the belief that they can be successful in STEM.

4) Develop the belief that anyone can be a 'Math Person.'

5) Collaborate with their classmates to solve problems.

Participation: Active participation is an important aspect of this course. After each series of lecture videos there will be a survey for you to complete. These will account for 5% of your overall grade.

Post Video Assignments: Each Monday, Wednesday, and Friday you are expected to watch lecture videos. These videos will be directly related to the post video assignments. These will be turned in on Edfinity by 11:59PM every Tuesday, Thursday, and Monday. These assignments will account for 25% of your overall grade. Your lowest post-video assignment will be dropped.

Homework: Each week you will have a homework assignment due on Sunday by 11:59 PM on Gradescope. These homework assignments will account for 35% of your overall grade and the relevant lectures will be located at the top of the assignment.

Flip Assignments: Each week you will need to complete an assignment using the Flip tool on Canvas. More information about how to use Flip will be located on Canvas. If you are unfamiliar with Flip, please do not hesitate to reach out for help. These assignments will account for 20% of your overall grade.
**Final Test:** A comprehensive final exam will be accessible beginning at 8:00 AM on Friday July 28th until 8:00AM on Saturday July 29th. Part of the exam will be on Edfinity and part of the test will be turned in on Gradescope. The final will account for 15% of your overall grade.

**Overall Grade Breakdown**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>5%</td>
</tr>
<tr>
<td>Post Video Assignments</td>
<td>25%</td>
</tr>
<tr>
<td>Homework</td>
<td>35%</td>
</tr>
<tr>
<td>Flip Assignments</td>
<td>20%</td>
</tr>
<tr>
<td>Final Test</td>
<td>15%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Tentative Course Outline**

*Daily Learning Objectives will be available on the Post Video assignments in Canvas*

*Specific due dates will be posted on Canvas*

<table>
<thead>
<tr>
<th>Week</th>
<th>Mon.</th>
<th>Wed.</th>
<th>Fri.</th>
<th>Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 26, 28, 30</td>
<td>1.1,1.2</td>
<td>2.2,2.3</td>
<td>2.4,2.5</td>
<td>Post Videos 1,2,3 Survey 1,2,3, Flip 1</td>
</tr>
<tr>
<td>July 3, 5, 7</td>
<td><em>Catch up</em></td>
<td>2.6,3.1,3.2</td>
<td>3.3,3.4,3.5</td>
<td>Post Videos 4,5 Survey 4,5 Flip 2, HW 1</td>
</tr>
<tr>
<td>July 10, 12, 14</td>
<td>4.1,4.2</td>
<td>5.1,5.2</td>
<td>5.3,5.4</td>
<td>Post Videos 6,7,8 Survey 6,7,8 Flip 3, HW 2</td>
</tr>
<tr>
<td>July 17, 19, 21</td>
<td><em>Catch up</em></td>
<td>5.5,6.1</td>
<td>6.2,6.3</td>
<td>Post Videos 9,10 Survey 9,10, Flip 4 HW 3</td>
</tr>
<tr>
<td>July 24, 26, 28</td>
<td>7.1,7.2</td>
<td>8.1,8.2,8.3</td>
<td><em>Final Test</em></td>
<td>Post Videos 11,12 Survey 11,12, Flip 5 HW 4</td>
</tr>
</tbody>
</table>
Guidelines:

Assignments

- All assignments will be turned in on Canvas either as an assignment or via Gradescope. More information on how to use Gradescope will be available on the course’s Canvas page.

- I encourage collaboration between classmates (except for on the final exam), but you should write up your own solutions.

- Please pay close attention to the presentation and clarity of your solutions. If I cannot read your work then you will not receive credit on the problem.

Communication

- Please give me as much possible information as you can about the subject that you plan on discussing with me.

- You are more than welcome to contact me at any time. You will get a response from me between the hours of 8 am and 7 pm. I aim to respond to you within 24 hours.

- **Please do not hesitate to reach out. I look forward to hearing from you!**

Late Policy: Sometimes we need more flexibility in our lives due to unforeseen circumstances. In this class, each assignment will have a grace period in which there will be no penalty for you to submit your assignment in order to grant you flexibility, but also to help keep you on track. Each grace period will be explicitly labeled on the assignment and on Canvas. If you have any questions or need any extra support please reach out to me.

Summer Deadlines:

- (Session 1) Drop: Monday, July 3rd; Request for “W”: Sunday, July 16th
- (Session 2) Drop: Monday, August 7th; Request for “W”: Sunday, August 20th

You will not be dropped for non-attendance or non-payment, you must drop yourself. Dropping before the deadline results in a full-tuition reversal/refund. Withdraw posts a W for the grade and full tuition is charged (no refund). For all dates and deadlines, including ‘change of grade option’ (P/NP) and grades due, here is the summer academic calendar: https://summer.ucsc.edu/studentlife. For questions about dropping, requesting a W grade for a course, or withdrawing from the summer quarter, email summer@ucsc.edu.
**Academic Honesty**: All members of the UCSC community benefit from an environment of trust, honesty, fairness, respect, and responsibility. You are expected to present your own work and acknowledge the work of others in order to preserve the integrity of scholarship. Cheating of any type is unacceptable and will result in disciplinary action. If you need help, please ask! Please see UCSC’s academic misconduct policy for more information at [UCSC Academic Misconduct](#).

**DRC Accommodations**: The Disability Resources Center (DRC) reduces barriers to inclusion and full participation for students with disabilities by providing support to individually determine reasonable academic accommodations. Operations continue via remote appointments. If you have questions or concerns about exam accommodations or any other disability-related matter, email the DRC Schedulers at drc@ucsc.edu for an appointment; you can also visit their website at http://drc.ucsc.edu.

**Religious Accommodations**: UC Santa Cruz welcomes diversity of religious beliefs and practices, recognizing the contributions differing experiences and viewpoints can bring to the community. There may be times when an academic requirement conflicts with religious observances and practices. If that happens, students may request the reasonable accommodation for religious practices. The instructor will review the situation in an effort to provide a reasonable accommodation without penalty. You should first discuss the conflict and your requested accommodation with your instructor early in the term. You or your instructor may also seek assistance from the Dean of Students office.

**Title IX/Care Advisory**: The [Title IX Office](#) is committed to fostering a campus climate in which members of our community are protected from all forms of sex discrimination, including sexual harassment, sexual violence, and gender-based harassment and discrimination. Title IX is a neutral office committed to safety, fairness, trauma-informed practices, and due process.

Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced sexual harassment or sexual violence, you can receive confidential support and advocacy at the Campus Advocacy Resources & Education (CARE) Office by calling (831) 502-2273. In addition, Counseling & Psychological Services (CAPS) can provide confidential, counseling support, (831) 459-2628. You can also report gender discrimination directly to the University’s Title IX Office, (831) 459-2462. Reports to law enforcement can be made to UCPD, (831) 459-2231 ext. 1. For emergencies call 911.

**Report an Incident of Hate or Bias**: UC Santa Cruz is committed to maintaining an objective, civil, diverse and supportive community, free of coercion, bias, hate, intimidation, dehumanization or exploitation. The Hate/Bias Response Team is a group of administrators who support and guide students seeking assistance in determining how to handle a bias incident involving another student, a staff member, or a faculty member. To report an incident of hate or bias, please use the Hate/Bias Reporting Form.
Student Resources:

- **Counseling and Psychological Services**: Many students at UCSC face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients’ cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

- **Tutoring and Learning Support**: At Learning Support Services (LSS), undergraduate students build a strong foundation for success and cultivate a sense of belonging in our Community of Learners. LSS partners with faculty and staff to advance educational equity by designing inclusive learning environments in Modified Supplemental Instruction, Small Group Tutoring, and Writing Support. When students fully engage in our programs, they gain transformative experiences that empower them at the university and beyond.

- **Slug Support Program**: College can be a challenging time for students and during times of stress it is not always easy to find the help you need. Slug Support can give help with everything from basic needs (housing, food, or financial insecurity) to getting the technology you need during remote instruction. To get started with SLUG Support, please contact the Dean of Students Office at 831-459-4446 or you may send us an email at deanofstudents@ucsc.edu.

- **Slug Help/ Technology**: The ITS Support Center is your single point of contact for all issues, problems or questions related to technology services and computing at UC Santa Cruz. To get technological help, simply email help@ucsc.edu.

- **On Campus Emergency Contacts**: For all other help and support, including the health center and emergency services, [start here](#). Always dial 9-1-1 in the case of an emergency.

*This Syllabus is subject to change. Any changes will benefit the students in this class.*