Math 11B Calculus II with Applications - Summer 2022
MWF 1:00 pm - 3:30 pm PT

Instructor: Jennifer Guerrero
(She/Her/Hers)
Office Hours: Weds. 4:00 pm - 5:00 pm, Fri. 11:30 am - 12:30 pm (PT) or by appointment on Zoom

We will be regularly using a Canvas page for this class. Visit canvas.ucsc.edu
All Zoom links will be available on Canvas.

Every student is encouraged to come to my office hours!

<table>
<thead>
<tr>
<th>TA: Xuguang Liu</th>
<th>Section: W 10am - 11am PT</th>
<th>Office Hours: TuTh 10am - 11am PT</th>
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<tbody>
<tr>
<td>TA: Tzu-Mo Kuo</td>
<td>Section: Thurs. 4pm - 5pm PT</td>
<td>Office Hours: Mon. 4pm - 5pm &amp; Tu. 3pm - 4pm PT</td>
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Course Learning Objectives

A successful student in this course will...

1) Demonstrate understanding of the key topics.
2) Enhance their problem-solving and critical thinking skills.
3) Collaborate with their classmates to solve problems.

Lectures: The lectures will be synchronous and will take place on Zoom (so will Office Hours). Lectures will be recorded and will be available for asynchronous viewing on Yuja via Canvas. You’re highly encouraged to attend the lectures synchronously, or office hours if you can’t attend lectures synchronously.

Gradescope: Any written assessment (see below) that needs to be turned in will have to be scanned and uploaded to Gradescope; links and more details will be available on Canvas.

Edfinity: We will use the online homework platform Edfinity. Compared to other platforms, edfinity provides quality service while being cost-effective. Some of the other products cost around $100 per quarter, while Edfinity is $25 per quarter.

References: Lectures will be based on the following books; also listed are some open source books that could be valuable references. You are not expected to buy copies of these books.

- Biocalculus (Calculus for Life Sciences) by James Stewart, Troy Day.
- Calculus for Biology and Medicine by Claudia Neuhauser, Marcus Roper.
- Calculus for the Life Sciences (A Modeling Approach) Volume 1 by James L. Cornette, Ralph A. Ackerman.
Assignments

Pre-Class Assignments: Before each lecture there will be reading material and short quizzes on Canvas. The Pre-lecture Reading will account for 10% of your overall grade.

Online Homework: You will have weekly homework assignments on Edfinity. You have unlimited attempts on your homework, but I recommend starting early! For more information about how to access Edfinity These homework assignments will account for 30% of your overall grade. The online homework will be due each Tuesday at midnight.

Written Homework: You will have weekly homework assignments on Edfinity. Each week after you submit your study journal you will submit three problems that correspond to the your study journal entry. These homework assignments will account for 10% of your overall grade. The written homework is due each Tuesday at midnight.

Study Journal:

- Each week, for each lecture, you will write a brief (1-2 paragraph) summary of a topic from that week’s lectures which either you find (1) very interesting, or (2) very difficult!

- If you find a topic interesting, you should explain why: what about it is particularly interesting or motivating? Why do you enjoy that topic? State the theorem, type of problem, formula or concept clearly and correctly at the beginning of your weekly write-up.

- If you find a topic difficult, you should explain why: what about it is confusing or difficult? how can the you address your difficulty with that topic, and what tools are available to help deepen your understanding?

- The Study Journal will be due weekly on Sundays at Midnight, with a paragraph for each lecture of the week (so, minimum of 3 paragraphs for most weeks, unless there is an exam).

- These assignments will account for 15% of your overall grade.

Test 1: A test will be accessible beginning at 8:00 AM on Friday July 8th until 8:00AM on Saturday July 9th . The test will account for 20% of your overall grade.

Test 2: A test will be accessible beginning at 8:00 AM on Friday July 22nd until 8:00AM on Saturday July 23rd. The test will account for 20% of your overall grade.
Overall Grade Breakdown

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Pre-Class Assignments</td>
<td>10%</td>
</tr>
<tr>
<td>Online Homework</td>
<td>30%</td>
</tr>
<tr>
<td>Written Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Study Journal</td>
<td>15%</td>
</tr>
<tr>
<td>Test 1</td>
<td>20%</td>
</tr>
<tr>
<td>Test 2</td>
<td>20%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>105%</strong></td>
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Tentative Course Outline

*Daily Learning Objectives will be available on the Pre-lecture Reading in Canvas*

*Specific due dates will be posted on Canvas*

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<tr>
<th>Week</th>
<th>Mon.</th>
<th>Wed.</th>
<th>Fri.</th>
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</thead>
<tbody>
<tr>
<td>June 20, 22, 24</td>
<td>No Class</td>
<td>5.1, 5.2</td>
<td>4.6, 5.3</td>
</tr>
<tr>
<td>June 27, 29, July 1</td>
<td>5.3, 5.4</td>
<td>5.5, 5.6</td>
<td>5.8</td>
</tr>
<tr>
<td>July 4, 6, 8</td>
<td>No Class</td>
<td>6.1</td>
<td>Test 1</td>
</tr>
<tr>
<td>July 11, 13, 15</td>
<td>6.3, 6.4</td>
<td>6.3, 6.4, 7.1</td>
<td>7.2, 7.4</td>
</tr>
<tr>
<td>July 18, 20, 22</td>
<td>7.5</td>
<td>Taylor Series</td>
<td>Test 2</td>
</tr>
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This Syllabus is subject to change. Any changes will benefit the students in this class.

Guidelines:

Assignments

- All assignments will be turned in on Gradescope or Edfinity. More information on how to use Gradescope and Edfinity will be available on the course’s Canvas page.

- I encourage collaboration between classmates (except for on the exams), 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 contact me primarily via Canvas.

- 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: This class will be using Time Banks. Different time banks are offered for different types of assignments. You have the option to choose 3 1-day extensions or 2 2-day extensions to be used on weekly homework. No questions asked!

Summer Deadlines:

• (Session 1) Drop: Monday, June 27 (tuition reversed) Request for “W”: Sunday, July 10 (no tuition reversal)
• (Session 2) Drop: Monday, August 1 (tuition reversed) Request for “W”: Sunday, August 14 (no tuition reversal)
• (8-Week & 10-Week) Drop: Monday, July 4 (tuition reversed) Request for “W”: Sunday, July 24 (no tuition reversal)

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:**

- **Modified Supplemental Instruction (MSI)** At Learning Support Services Tutors, Learning Assistants, and staff work with campus partners to support students and advance educational equity by designing inclusive learning environments in Modified Supplemental Instruction, Small Group Tutoring, and Writing Support. Modified Supplemental Instruction (MSI) support is offered for this course. In MSI, you can expect the MSI leader to facilitate cooperative group activities designed to have students work together on the course content. MSI is offered at least three times each week for the entire quarter. The MSI leader is an undergraduate student who took the class, did well, and is trained to facilitate group sessions to focus on you, the students, and what you need to succeed in the course. LSS provides continuous training for MSI leaders to create inclusive spaces for students and facilitate group work effectively. MSI is for everyone and open to all students in class to get extra practice on the things you already know or the things you want to know better. Attendance is voluntary; however, students who attend MSI sessions weekly earn a higher final grade than students who do not participate in MSI.

**Want to be successful with MSI?** Bring your books, lecture notes, questions, and
be open to working collaboratively with your peers. You can access the MSI Schedule on TutorTrac or check out Learning Support Services’ website for more information on MSI and other programs LSS offers to support student success.

- **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.