Instructor:	Linlin Zhang **Email**: zhanglinlin@fhda.edu **Canvas:** https://deanza.instructure.com/
Text:	Calculus Early Transcendentals, Stewart (9th edition), WebAssign online HW (Embedded **in Canvas) $60** Multi-term Access you may have purchased for previous terms for Math 1ABCD sequences
Equipment:	**A scientific or Graphing Calculator is required**
Class meeting	**E31 MW 4:00 – 6:15 PM**
Office Hours:	**E31 MW 12:40 – 1:30PM or email me for appointments**

1. **Prerequisite:**

    Prerequisite: Mathematics 1B or equivalent (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

2. **Course Description:**

    Students in this course will learn about infinite series, lines, and planes in three dimensions, vectors in two and three dimensions, parametric equations of curves, derivatives, and integrals of vector functions.

3. **Student Learning Outcomes:**

    - Graphically and analytically synthesize and apply multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.
    - Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and Divergence Theorem.
    - Synthesize the key concepts of differential, integral and multivariate calculus.

3. **Drop Policy:**

    Attendance is integral to your success in this course. I expect you to attend all class meetings. **It is always YOUR RESPONSIBILITY to drop** the class if you feel like you can't continue for any reason.

4. **Tutoring**

    The Math, Science, and Technology Resource Center **(S43)** provides free online tutoring **Monday – Thursday 10AM – 5PM**. For more information, go to   www.deanza.edu/studentsuccess/mstrc
    You can also use "NetTutor" link on the navigation in Canvas or attend my office hour. Email me for appointments if you want to meet at alternative time.

5. **Academic Integrity:**

    All tests are allowed some notes, but your work must reflect what you know based on your own knowledge and thought.   Referencing or copying another student's solutions, or searching answer online during tests are considered cheating. Violation of this policy will result in the student receiving ZERO credit for the entire assignment or test. Further action may be taken depending on the circumstance.

6. Support Services

Students with disabilities needing reasonable accommodations should inform me in the beginning of the quarter. To begin the reasonable accommodations process, I will need to fill out a request form from the Disabilities Support Services (DSS). For more information, please visit the DSS office at SCSB 141, call (408) 864-8753 /(408) 864-8748 TTY, or go to www.deanza.edu/dss.

7. Grade:

All grades will be posted on <u>Canvas</u> as soon as they become available. It is your responsibilities to check Canvas at least once a week to monitor your grades for the class.

In Class (drop 2)	20%	**A:** 90-100%
Homeworks (drop 1)	14%	**B:** 80-89%
3 Quizzes	9%	**C:** 70-79%
2 Exams	38%	**D**: 60–69%
Final Exam	19%	**F:** 0-59%
Total	100%	

<u>In Class Participation</u>

Each lesson has in-class practice near the end. You will complete the handout and turn them in. Keep in mind that your problems are very similar to the ones I do, but adapted with different numbers. In the events of absence, you will receive zero for the in-class. Two lowest scores will be dropped for overall grade calculation at the end of the term.

<u>Homework:</u>

The purpose of homework is to help you learn the material in the course. Homework assignments are available on **WebAssign**, but you need to access it through Canvas so your accounts can be linked together. See Canvas homepage for more information.

Each homework set will be scaled to <u>10 points</u> and the <u>lowest one</u> can be dropped. You can request for HW extension through WebAssign. Everyone gets total of **10 days extensions** (from the date of approval) without penalty. After that there is a **10% penalty** on each extension day.

<u>Quizzes:</u>

Three Quizzes are proctored quizzes and will be given in the classroom on quiz days. Quiz problems are like homework problems and lecture examples. No makeup quizzes.

<u>Exams:</u>

TWO exams will be given with opportunities of test corrections. More details about test correction will be given during class time. You CAN'T drop any exam.

<u>Final Exam:</u>

A two-hour comprehensive final exam will be given. A student who misses the final exam and does not contact the instructor will receive a ZERO.

8. **Class Calendar**

Week	Month	Monday	Wednesday	Notes
1	January	8 10.3 Polar Coord	10 10.3 Polar	
2	January	15 **No School** MLK Holiday	17 10.4 Sector Area and Arc Lengths	**Saturday 1/20** last day to add. **Sunday 1/21** last day to drop with no record.
3	January	22 11.1 Sequence	24 **Quiz 1** 11.2 Series	
4	January	29 11.3 Integral Sum 11.4 Comparison Test	31 11.4 11.5 Alternating Series	
5	February	5 11.6 Ratio and Root Tests 11.7 Testing Series	7 **Test 1 (10.3 – 11.5)**	
6	February	12 11.8 Power Series 11.9 Function as Power Series	14 11.10 Taylor Series 11.11 Applications of Taylor Series	
7	February	19 **No School** President's Holiday	21 **Quiz 2** 12.1 3D Coordinates 12.2 Vectors	
8	February	26 12.3 Dot Product 12.4 Cross Product	28 12.5 Equations of Lines and Planes	**Friday, 3/1:** last day to drop with a "W".
9	March	4 13.1 Vector Functions and Space Curves	6 **Test 2 (11.6 – 12.5)**	
10	March	11 13.1 Vector Functions	13 13.2 Derivatives and Integrals of Vector Functions	
11	March	18 13.3 Arc Length	20 **Quiz 3** 13.4 Velocity and Acceleration	
12	March	25 No Class	27 **Final Exam** **4:00 – 6:00 PM**	

Student Learning Outcome(s):

• Analyze infinite sequences and series from the perspective of convergence, using correct notation and mathematical precision.
• Apply infinite sequences and series in approximating functions.
• Synthesize and apply vectors, polar coordinate system and parametric representations in solving problems in analytic geometry, including motion in space.

Office Hours:

M	12:30 PM	01:00 PM	In-Person	E31
W	12:30 PM	01:30 PM	In-Person	E31