

Cañada College (Sequoia High School) Syllabus

Math 253: Calculus III

Fall 2026

Instructor Raymond Lapuz

E-Mail rlapuz@seq.org

Class Times

Period 2

Course Math 253QYH, CRN: 90238

For Sequoia High School

Prerequisites:

Satisfactory completion of Math 252 with a grade of C or better or appropriate score on the college placement test.

Course Description:

This course is the third in a series of calculus and analytic geometry. This is the calculus of multivariable functions. The course covers topics in vectors, partial derivatives, double and triple integrals, line integrals and vector analysis theory such as Green's, Stokes', and Gauss' Theorems.

Course Materials:

Text: *CALCULUS, VOLUME 3*, by Strang and Herman.

<https://openstax.org/details/books/calculus-volume-3>

Learning Management Systems:

- Canvas: <https://sequoia.instructure.com/>
- MyOpenMath: This will be integrated within Canvas; no need for an external link.

Student Learning Outcomes:

By the end of this course, you will be able to...

- compute derivatives of multivariable functions and apply to geometry and optimization problems.
- model motion using vectors valued functions.
- identify and compute the different types of integrals.
- recognize and apply the fundamental theorem of calculus.

Cañada Resources:

- DRC: If you have a disability which may require classroom or test accommodations, please contact Disabled Students Programs and Services:
<http://canadacollege.edu/disabilityresourcecenter/>.
- **Title IX:** The San Mateo County Community College District is committed to maintaining safe and caring college environments at Cañada College, College of San Mateo and Skyline College. The District has established policies and procedures regarding Sexual Misconduct, Harassment, and Assault. A District website has also been developed which provides you with important information about sexual misconduct and sexual assault.
<http://smccd.edu/titleix/>.

Policies:

- Academic Integrity Policy: DO NOT CHEAT!!! Cheating will result in a failing grade in the assignment and will be reported to the VP of Student Services. For more information, visit: http://www.canadacollege.edu/inside/acad_integrity/.
- Attendance will be taken at the beginning of each class meeting.

Grading:

Your course grade will be based on the following:

- **Homework (15%):** Homework will be assigned and completed the following class meeting. Each section will have between 10 to 20 questions, and a random number of problems will be graded.
- **Quizzes (10%):** There will be occasional quizzes. These will be short answer questions that would take between 10-20 minutes of class time. No make-ups.
- **Journal Assignments (5%):** You will have periodic journal assignments that ask you to reflect about your progress as a student in this course. These are short and simple assignments that are checked off when completed.
- **Show Work Videos (10%):** You will have periodic journal assignments that ask you to reflect about your progress as a student in this course. These are short and simple assignments that are checked off when completed.
- **Exams (40%):** There will be two exams, each covering about 2-3 chapters from the textbook.
- **Final Exam (20%):** The comprehensive final exam will be during exam week.
You must perform at least satisfactory on the final to pass the class.

A standard grading scheme will apply:

		88%- 90.9%	B+	76%- 79.9%	C+	68%- 69.9%	D+		
95%+	A	83%- 87.9%	B	70%- 75.9%	C	63%- 67.9%	D	Below 60%	F
91%- 94.9%	A-	80%- 82.9%	B-			60%- 62.9%	D-		

Topics:

- Chapter 1: Parametric Equations and Polar Coordinates
- Chapter 2: Vectors in Space
- Chapter 3: Vector-Valued Functions
- Chapter 4: Differentiation of Functions of Several Variables
- Chapter 5: Integrals of Functions of Several Variables
- Chapter 6: Vector Calculus