

**Math 2110Q**  
**Multivariable Calculus**

Summer 2024

**Instructor:** Stephen Zito

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**Office Hours:** By appointment.

**Text:** *Multivariable Calculus*, 8th ed., by James Stewart (no need to purchase).

**Course Description:**

- The course will be delivered online and asynchronous. I will post videos every Tuesday, Wednesday, and Thursday morning by 9:00 A.M.
- Videos will be created via HuskyCT's Blackboard Collaborate tool.
- Appointments will also be via BC (Blackboard Collaborate).

**Homework:**

- Homework will be posted every Tuesday, Wednesday, and Thursday.
- These will NOT be collected.
- I highly recommend giving the problems a shot. Math is a skill and you only get better at a skill by practicing.
- We will use Paul's Online Notes.

**Quizzes:**

- There will be two quizzes every Tuesday, Wednesday, Thursday.
- I will post the quizzes on HuskyCT at 9:00 AM.
- Each quiz is worth 5 points.
- They will be due by 11:59 PM the same day.
- The first day of class, the day of the midterm, and the day of the final will not have quizzes.
- Quizzes are always on the previous day's material.

**Exams**

- The midterm exam will be 6/12/24
- The final exam will be 6/27/24.
- You must work **ALONE** on exams.

**Make-Up Policy:**

- There are **NO** make-ups on quizzes. Let me repeat that "**NO** make-ups."
- I will drop five quizzes at the end of the term.
- If you fail to submit the midterm, then the percentage weight carries over to the final exam.

**Submission of Assignments**

- Any format is acceptable as long as I can open it, see it, and read it. I prefer pdfs.
- Every assignment is due by 11:59 PM. A submission of 11:59:01 or later is past due.
- Technical issues are your responsibility.
- Time zone differences are your responsibility.
- Don't wait till the last minute or you risk not submitting on time.
- You get **ONE** submission.
- Submissions must be via HuskyCT.
- You should receive a confirmation email upon a successful submission.

## Grades:

Quizzes	every week	50%
Midterm Exam	6/12	25%
Final Exam	6/27	25%

- Any discussion of grades must be within one week.
- Your final grade is calculated via the final grade template.
- The grades on HuskyCT are for record keeping only.

## Disabilities

- If you anticipate or experience physical or academic barriers based on disability or pregnancy, or require accommodations, please contact Rachel Julian, Waterburys CSD Regional Campus Coordinator, to discuss options.
- Her email is Rachel.julian@uconn.edu and she can also be reached through the Center for Students with Disabilities (860) 486-6899, or <http://csd.uconn.edu/>.
- <https://csd.uconn.edu/documentation-guidelines/>
- <https://csd.uconn.edu/regional-campus-students/>

## A.I. Software and Copying Answers

- Don't use it.
- Any submission that is A.I. generated will receive a zero.
- It's not particularly good at math.
- If you copy your answers from Chegg, Course Hero, each other, ect., you'll receive a zero.
- If you wish to discuss/dispute your grade, you have one week. See above.

## General Thoughts

- Communication is **KEY**. Please, don't be afraid to contact me if you have questions, concerns, or comments.
- Seriously, contact me and we can go over any problem or topic you want.
- In a F2F class, I allow open notes for all quizzes and tests. The same will apply for this course.
- Please, try not to google every single question. If you're stuck, contact me and we can talk it through.
- In a typical semester, the most difficult aspect of Calculus 3 is the amount of material. For a summer session of Calculus 3, the difficulty is compounded by the fast pace.
- If you find yourself falling behind, contact me! Stop by office hours and we can review and discuss.
- Check HuskyCT announcements **EVERY DAY**.

**Tentative Schedule:**

<b>Day</b>	<b>Section</b>	<b>Topic</b>
1	12.1, 12.2	Three-Dimensional Coordinate System, Vectors
	12.3	Dot Product
2	12.4, 12.5	Cross Product, Lines and Planes
	12.6	Cylinders and Quadric Surfaces
3	14.1, 14.3	Functions of Several Variables, Partial Derivatives
	14.4	Tangent Planes and Linear Approximation
4	14.5, 14.6	Chain Rule
	14.6	Directional Derivatives
5	14.7	Maximum and Minimum Values
	14.8	Lagrange Multipliers
6	15.1	Double Integrals over Rectangles
	15.2	Double Integrals over General Regions
7	15.3	Double Integrals in Polar Coordinates
	15.6	Triple Integrals in Cartesian Coordinates
8		Midterm Exam
9	15.7	Triple Integrals in Cylindrical Coordinates
	15.8	Triple Integrals in Spherical Coordinates
10	13.1, 13.2	Vector Functions, Calculus of Vector Functions
	13.3	Arc Length and Curvature
11	16.1	Vector Fields
	16.2	Line Integrals
12	16.3	The Fundamental Theorem of Line Integrals
	16.4	Green's Theorem
13	16.5.	Curl and Divergence
	16.6	Parametric Surfaces and Their Areas
	16.7	Surface Integrals
14	16.8	Stokes' Theorem
	16.9	Divergence Theorem
15		Final Exam