Math 2110Q Fall 2023
Multivariable Calculus
Sections: W31 TuTh 3:30 - 5:10 PM
Room: WREC 203
Instructor: Stephen Zito
E-mail: stephen.zito@uconn.edu
Personal Website: https://www.stephen-zito.math.uconn.edu/
Office Hours: WTBY 315, TuTh 12:30 - 1:45 PM and by appointment.

Text: *Multivariable Calculus*, 8th ed., by James Stewart.

Course Description:
- Two and three-dimensional vector algebra, calculus of functions of several variables, vector differential calculus, line and surface integrals.
- The course will be primarily face-to-face lecture and discussion.
- Submission of course work will be (mostly) via HuskyCT.
- All information and materials will be posted to HuskyCT.
- All videos and notes will be posted by 9:00 A.M. Tuesdays and Thursdays.
- One-on-one and group video sessions will be via Blackboard Collaborate.

Homework:
- Homework will be posted every Tuesday and Thursday by 9:00 A.M.
- 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.
- To do well in the course, you must do the homework.

Quizzes:
- There will be quizzes every Tuesday and Thursday by 9:00 A.M.
- I will post the quiz by 9:00 AM on HuskyCT.
- Each quiz is worth 5 points.
- The topic of each quiz is based on the previous class material.

Quiz submission policies:
- Quizzes MUST be submitted via HuskyCT. Email submissions will not be accepted.
- Any format is acceptable as long as I can see it, open it, and read it.
- All quizzes are due by 11:59 PM. 11:59:01 is a late submission.
- ANY submission after this time will result in a zero.
- You have ONE and only ONE submission.
- If you submit the wrong file or a corrupted file, this will result in a zero.
- A saved draft but no submission will result in a zero.
- You should receive a confirmation email upon successful submission.

Exams
- Exam 1 will be 10/5/23.
- Exam 2 will be 11/09/23.
- The final exam will be the week of 12/11/23 - 12/15/23.
- The exams are in-class.
- The exams are open-note.

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 semester.
- There are **NO** make-ups on projects. Let me repeat that "**NO** make-ups."
- If you miss an exam, then the percentage weight carries over to the next exam.
- There is no retroactive adjustment of any exam percentages.

Midterm Grades:
- Midterm grades are required for all 2000 level classes. I will post midterm grades after Exam 1. They are meant to give you an idea of how you're faring in the course so far. The grades are not permanent and do not affect you GPA.
- Your midterm grade will be your Exam 1 grade.
- If you do not take Exam 1, your midterm grade will be "N."

Email Policy
- I will respond to emails within 24 hours.
- I will not respond to emails on Sunday.
- Please include full name, class, and section.
- Please use university email.
- Do not call me Stevie.

Free Resources
- https://faculty.atu.edu/mfinan/calreform3.pdf
- An excellent supplement to the videos and notes.
- Hundreds of problems with answers (no detailed solutions).
- Paul's Online Notes.
- He is the G.O.A.T.

Modifications
- I reserve the right to change the syllabus if it becomes necessary.
- Any changes will be posted on HuskyCT and announced in class.

Discussion of Grades
- We can discuss any grade issue you may have.
- Any concerns must be brought to my attention within one week of the posted grade.
- After one week, the grade is final.

A.I. Software
- Don't use it.
- Any submission that is A.I. generated will receive a zero.
- It's not particularly good at math.

Grades:

Quizzes	every week	25%
Exam 1	10/5	25%
Exam 2	11/9	25%
Final Exam	TBD	25%

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/
- Accommodations are not retroactive.

Mental Health

If you are experiencing undue personal or academic stress at any time during the semester or need to talk with someone about a personal problem or situation, I encourage you to seek support as soon as possible. I am available to talk with you about stresses related to your work in my class. Additionally, I can assist you in reaching out to any one of a wide range of campus resources, including:

- Mental Health Resource Center 203-236-9817 or Claudia.Pina@uconn.edu
  https://waterbury.uconn.edu/student-life/student-resources/mental-health/
- Student Services and Academic Advising https://waterbury.uconn.edu/student-life/student-resources/student-affairs/
- Center for Students with Disabilities https://csd.uconn.edu/

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.
- Please, try not to google every single question. If you're stuck, contact me and we can talk it through.
- Remember, the exams are all in-person. If you have not adequately prepared, the exams will be quite challenging.
- Attempting all homework problems is the single most important thing you can do.
- I can not stress the above point enough!!!!!!

Tentative Schedule:

Week	Section	Topic
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, Directional Derivatives
	14.7	Maximum and Minimum Values
5	14.8, 15.1	Lagrange Multipliers, Double Integrals over Rectangles
	15.2	Double Integrals over General Regions
6		Review
		Midterm Exam 1
7	15.3	Double Integrals in Polar
	15.6	Triple Integrals in Cartesian Coordinates
8	15.7, 15.8	Triple Integrals in Cylindrical Coordinates
	15.9	Triple Integrals in Spherical Coordinates, the Jacobian
9	13.1, 13.2	Vector Functions, Calculus of Vector Functions
	13.3	Arc Length and Curvature
10	16.1	Vector Fields
	16.2	Line Integrals
11		Review
		Midterm Exam 2
12	16.3	The Fundamental Theorem of Line Integrals
	16.4	Green's Theorem
13		Thanksgiving Break
		Thanksgiving Break
14	16.5	Curl and Divergence
	16.6	Parametric Surfaces and Their Areas
	16.7	Surface Integrals
15	16.8	Stokes' Theorem
	16.9	Divergence Theorem
16		Final Exam (Day and Time TBD)