UCONN

Math 2110-801 Multivariable Calculus Fall, 2026

Instructor: Venu G Menon (venu.menon@uconn.edu)

Mondays and Wednesdays from 9:05 AM to 10:45 AM.

All the material for this course should be accessed through Husky CT

Course Objectives

By the end of the semester, students should be able to:

1. Use three-dimensional Cartesian coordinates (including vectors and vector operations) to classify and distinguish between common equations and graphs of surfaces and curves.
2. Evaluate first and second partial derivatives of a multivariable function and relate these functions and their values to the behavior of a surface.
3. Use partial derivatives to determine equations of tangent planes, to locate and to classify critical points, and to calculate a rate of change of a surface in any direction.
4. Identify points in two-dimensional (Cartesian and polar) and three-dimensional (Cartesian, cylindrical, and spherical) coordinate systems and express common equations of surfaces and boundaries of regions in each system.
5. Write, reorder, evaluate, and interpret double and triple integrals of regions in the plane and space, respectively.
6. Set up, evaluate, and interpret line integrals of a scalar function or vector field over a given curve, applying famous results like the Fundamental Theorem for Line Integrals and Green's Theorem when appropriate.
7. Set up, evaluate, and interpret surface integrals of a scalar function or vector field over a given surface, applying famous results like Stokes' Theorem and the Divergence Theorem when appropriate.

Enrollment Requirements: MATH 1132Q or MATH 1152Q or a score of 4 or 5 on the AP Calculus BC exam. Recommended preparation: a grade of C- or better in MATH 1132Q. May not be taken for credit after passing MATH 2130Q or MATH 2143Q. May not be taken out of sequence after passing MATH 2720, 3146, 3160, 3330, 3370, 3410, 3412, 3510, or 3610. Repeat restrictions apply; see advising.uconn.edu/repeat-policy.

Textbook Information: *Multivariable Calculus:* 9th Edition, by James Stewart

with ***WebAssign Access Code***.

Cengage/WebAssign access and the Husky Book Bundle: *If you are enrolled in the Husky Book Bundle, you should receive this access at no additional charge. To receive your access, please go to the UConn Bookstore with your student ID and follow signs for the Husky Book Bundle. Let the staff know you need a manager to get you an access card for your Calculus course. For more information about the Husky Book Bundle click here.*

The following sections from the book will be covered:

12.1 – 12.6, 13.1 – 13.3, 14.1, 14.3 – 14.8, 15.1 – 15.3, 15.6 – 15.8, 16.1 – 16.9

Grading

There will be three tests (20% each), graded homework on WebAssign (15%)
and a Cumulative Final (25%)

***Test 1**- September 30 Test **2**- November 2 **Test 3**- December 7*

***Final** – Date will be announced.*

Calculators & Resources: No calculators, websites, books/notes are allowed on course exams. Use of prohibited materials will result in a zero on the assessment.

Office Hours

In Person Office Hours: Mondays & Wednesdays 12:30 – 2:00 in Room 3:30
& By Appointment.

Online Office Hours via WEBEX: By Appointment – Please send me an email for appointment.

WebAssign

The homework is assigned online using the online homework system WebAssign. To access your homework online you must go to Husky CT.

Browsers

Please note that many students have experienced problems using WebAssign with Internet Explorer or Safari. We recommend that you use Firefox or Chrome.

Academic integrity

Please be familiar with the university policy on academic integrity. All breaches of this code of conduct will be taken seriously and handled as per university regulations.

Contacting me

I can be reached by email (venu.menon@uconn.edu)

How to succeed in this course

The most important thing is not to get behind; you need to keep up with the material covered in the class on a regular basis. We will be assuming that you know all the material already covered and use that material in the class. Also, if you have any doubts about what is done in the class, clarify them immediately – don't wait for another day.

Student Responsibilities and Resources:

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources.