

Math 2310 Syllabus

Course title and number Calculus III (MATH 2310, Sec. 300/301)

Term Fall 2020

Class times and location Mondays and Wednesdays/3:30PM-4:45PM/Web-Based Course

Instructor Information

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Course Description and Prerequisites

Description:

The course is an introduction to calculus of functions of several variables. We will study the geometry of two and three dimensions initially, including dot and cross products of vectors. Multivariable differential calculus includes partial derivatives, directional derivatives, the chain rule in several variables, and extrema of functions of several variables including the technique of Lagrange multipliers. We will then study integration of scalar fields (functions) and vector fields, and integration over curves, surfaces and 2 solids. The course culminates with the fundamental theorem of calculus in higher dimensions, in various incarnations (Green's, Stokes', and the divergence theorems particularly).

Students are advised that this course moves very quickly. It is very important to stay abreast of the current topics so as not to fall behind. Also note that while the material at the beginning of the course is comparatively elementary, the later topics will be entirely novel and require substantial effort to master.

Prerequisites: MATH 1320 or the equivalent.

Textbook and/or Resource Material:

- Multivariable Calculus, 8th edition, by James Stewart.
 - You have the option of either purchasing a new textbook (ideally one with WebAssign access bundled with it), purchasing a used textbook (and buying access to WebAssign separately), or purchasing an e-book (along with your access to WebAssign).
 - Regardless of which version of the textbook you buy, you will need to purchase access to the online homework system WebAssign by the following **two** options:
 - * Purchase WebAssign single-term access online through the WebAssign website.
 - * Purchase a single-term WebAssign-access card at the UVA Bookstore.

To login into WebAssign (http://www.webassign.net/uva/login.html) you will need our class key:

virginia 2033 6804.

Grade Breakdown:

Activity	Date	Percentage
Homework	Weekly	50%
Classwork/Quizzes	Weekly (minimum)	15%
Exam I	Last week of September	10%
Exam II	Last week of October	10%
Final Exam	Monday, December 07, 2020 2:00PM-5:00PM	15%
TOTAL		100%

A = 90 - 100%

B = 80 - 89%

C=70-79%

D = 60 - 69%

F = 0 - 59%

***At the end of this semester, you will receive the grade you *earned* in the course according to the distribution above (no exceptions).

***Any question regarding grading must be done the day an assignment is returned to you, or NO change will be made. If there is an adding mistake, you have one week to have the correction made.

*** We will have a total of three exams: two midterms and one final exam. The first midterm will be graded before the drop day.

Late work policy: Late work (for which you do not have a University approved excused absence) will NOT be accepted.

Graded Homework: Most of the homework will be online and done through the online homework system WebAssign, access to which requires a login. You will need to purchase access to WebAssign either as part of your textbook purchase or on its own; you may also opt for an e-book version of the text if you wish. The homework will be posted on the Collab site for this course. Although most of it will be done in WebAssign, the assignments posted on Collab may also include some extra Homework which will require to be physically turned in.

Attendance: Regular attendance is expected. Attendance and class participation may be used in determining borderline grades. Students are expected to be on time for class and stay for the entire class period. In addition, per UVA policy, nonattendance at any of the first 3 classes may result in being dropped from the course. This lets students who are eager to enter the course and are waitlisted a chance to add into the course as soon as possible.

Resources: Please check the Math Collaborative Learning Center website http://people.virginia.edu/~psb7p/MTCsch.html for details about Math 2310. You are also highly encourage to take advantage of my office hours and those of our TA.

Cell phone policy: All cell phones must be turned OFF and out of sight during class (NO TEXTING!).

Calculator policy: Calculators will NOT be allowed for any examination in this course.

Learning Needs: If you have learning needs that have been evaluated by the Learning Needs and Evaluation Center (LNEC), you must bring me the documentation from LNEC as soon as you are evaluated.

Honor Code: The Honor Code will be strictly observed in this class. Please remember to pledge each of your examinations.