

**MATH 2300 - MULTIVARIABLE CALCULUS - VANDERBILT UNIVERSITY,
FALL 2023**

Instructor: Professor Jesse Peterson
e-mail: jesse.d.peterson@vanderbilt.edu

Office: SC 1414

Office Hours:

Tuesdays 8:30 - 9:40pm

Thursdays 2:30 - 4:00pm

Material:

The topics we will cover in this course include: Vectors, curves, and surfaces in space. Functions of several variables, partial derivatives, multiple integrals. Vector integral calculus, including line and surface integrals. Essentially, everything covered in chapters 12-16 of the book **Calculus** by James Stewart, ninth edition. ISBN: 9781337624183

Website:

There is a website for the course that contains a tentative schedule as well as information about homework, exams, etc. It is accessible from math.vanderbilt.edu/peters10/

Exam dates (in-class):

There will be two in-class exams during the semester. There is also a comprehensive two-hour final exam. No alternate final exam will be given.

Midterm exams:

Tuesday, October 3rd: Covering material in sections 12.1-14.8, excluding Section 13.4.

Thursday, November 30th: Covering material in sections 15.1-16.7, excluding Section 15.4.

Final exam (in-class, covering all sections 12.1-16.9, excluding 13.4 and 15.4)

3:00-5:00pm: Tuesday, December 12th.

Homework:

There will be homework assigned to each section of the book that we cover, the assignments for Sections 16.8 and 16.9 are option and will not count toward the homework grade. This homework will be assigned and submitted through our course page on WebWork:

webwork.app.vanderbilt.edu/webwork2/MATH-2300-10-2023Fall/

WebWork allows for an unlimited number of attempts at each problem, and will give instant feedback as to correctness. The assignments are due one week after we cover the corresponding section in class. An additional one-week grace period will also be given so that the last day to complete each assignment will be exactly two weeks after the date we cover the corresponding section in class. You are encouraged to work together in small groups to complete the homework assignments, however each student must submit their own solutions through the WebWork page.

Take-home Quizzes:

Near the end of each chapter we cover there will be a take-home quiz assigned. These are to be submitted individually to GradeScope to be graded. Unlike the homework, only one attempt will be allowed, although partial credit may be assigned for incomplete solutions. These quizzes will be designed to mimic problems on the exams, and so while working in groups or using other resources (e.g., the textbook, MathStackExchange, ChatGPT) are not strictly forbidden, students are encouraged to work individually to mimic the setting of an exam.

Grades:

For the course grade, the following scale will be used: A:93-100, A-:90-92, B+:87-89, B:83-86, B-:80-82, C+:77-79, C:73-76, C-:70-72, D+:67-69, D:63-66, D-:60-62, F:0-59. The course grade will be based on homework (15%), take-home quizzes (10%), midterm exams (20% each), and final exam (35%). Individual exams may be curved when appropriate but the final grade will not be curved.

Make-up policy:

There will be no make-up tests, take-home quizzes, or homework assignments. We will follow the make-up policy guidelines set forth by the College of Arts and Sciences.

Academic integrity:

You will all be held to the standards set forth in the Student Handbook.

Tutoring Services:

If you need additional help, the first resource should be to come and talk to me during office hours. Additional tutoring resources are listed as follows.

Calculus Tutored Study Halls:

This is run by the Mathematics department and is available to all students taking calculus (including MATH 2300). Look for fliers about this hanging on the walls of the math department.

Drop-in STEM Tutoring: <https://engineering.vanderbilt.edu/tlsamp/tutorial-services.php>

This is run by the Engineering department and is available to all students taking introductory STEM courses (including MATH 2300).

Vanderbilt Tutoring: <https://www.vanderbilt.edu/tutoring/subjects/mathematics/>

This tutoring service can provide individual or math-focused group meetings.

Attendance: (from the student handbook) It is in the interest of every student to attend all class sessions; each student has an obligation to contribute to the academic performance of all by full participation in the work of each class. Students are therefore expected to attend all scheduled meetings of classes in which they are enrolled. At the beginning of the session, each instructor will explain the policy regarding absences, and thereafter will report to the office of the appropriate Dean the name of any student whose achievement in a course is adversely affected by excessive absences. In such cases, the Dean, in consultation with the instructor, will take appropriate action, which may include dropping the student from the class. Students dropped after the deadline for withdrawal receive the grade of F. Class attendance may be a factor in determining the final grade in a course.

Accommodations: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Access Services Center (www.vanderbilt.edu/student-access/). They will determine with you what accommodations are appropriate and communicate them to the instructor. This service is confidential.