

MATH 244 — CALCULUS IV

Instructor: Kenneth Corea kcorea@hawaii.edu

Lectures:

Section 002 MWF 12:30-1:20 Holmes 247
Section 003 TR 12-1:15 Keller 303

Office Hours: MTWR 3-4 Keller 402E

Book: *Calculus*, 8th Edition, by Stewart (ISBN-13: 9781285740621).

Course description: Multiple integrals; line integrals and Green's theorem; surface integrals, Stokes' and Gauss' theorems.

Prerequisites: A grade of C or better in Math 243.

Course management: Course announcements and materials will be available on our course page: https://math.hawaii.edu/~kcorea/courses/fall_2024/244/

Grades: Your grade is broken down as follows:

Homework	20%
Quizzes	10%
Exams	45% (3x15%)
Final	25%

The standard letter grade scale will be used.

Homework: There will be weekly written homework assignments, due at the end of each week during lecture. No electronic submissions will be accepted. All assignments are weighed equally. A subset of each problem set will be graded.

Quizzes: There is a timed quiz for every section we cover in the textbook. All quizzes will be conducted through WebAssign, the course codes are:

Section 002 `hawaii 4884 3518`
Section 003 `hawaii 0290 3362`

Each quiz will become available after we cover the associated section and will be available for one week. Take the “practice quiz” to make sure you understand how quizzes work and that you have the necessary software. Obviously, quizzes are open book/notes, however, I highly encourage you to simulate test conditions.

Exams: There will be three exams, three midterm exams and a final. For each exam you may bring a two-side 3x5 notecard “cheat-sheet” which can be turned in for extra credit.

Exam	Section 002	Section 003
1	Friday 9/27	Thursday 9/26
2	Friday 10/25	Thursday 10/24
3	Friday 11/22	Thursday 11/21
Final	Friday 12/20 12-2	Thursday 12/19 12-2

Make-up Policy: In general, homework and quizzes will not be excused. Examinations can be made up with a valid excuse.

Academic integrity: Cheating, plagiarism, and academic dishonesty will not be tolerated.

Electronic Devices: No electronic devices are permitted at any time; this includes: calculators, cell phones, cameras, recording devices, laptops, etc. The only exception is the use of a tablet for note taking.

KOKUA: I am happy to work with you and the KOKUA Program (Office for Students with Disabilities), if you need course accommodations. For more information visit their webpage <https://hawaii.edu/kokua/>.

Tentative Schedule: We will cover chapters 15 and 16 of the Stewart text. The following is a rough timeline of what we are covering each week.

Week	Topic
1	Double integrals
2	Polar Coordinates, Applications, <i>Labor Day</i>
3	Surface Area
4	Triple integrals
5	Cylindrical Coordinates; Exam 1
6	Spherical Coordinates
7	Change of Variables
8	Vector Fields
9	Line Integrals; Exam 2
10	Fundamental Theorem for Line Integrals
11	Green's Theorem, <i>Election Day</i>
12	Curl and Divergence; <i>Veteran's Day</i>
13	Parametric Surfaces; Exam 3
14	Surface Integrals; <i>Thanksgiving</i>
15	Stokes' Theorem
16	The Divergence Theorem
17	Finals week