

MATH 2210-1, CALCULUS III, FALL 2013

Classroom: JTB 130 **Time:** MWF 9:40 – 10:30
Instructor: Domingo Toledo
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Office: JWB 324 **Phone:** (801) 581-7824
Office Hours: M, W, F 10:45–11:35, or by appointment.
Web-page: <http://www.math.utah.edu/~toledo/2210F13.html>

Prerequisite: Grade “C” or better in Math 1220 or 1250 or 1320, or AP Calculus BC score of at least 4.

Textbook: Varberg, Purcell and Rigdon, *Calculus*, Ninth Edition. Any version of the ninth edition should work.

Course Description: This is a course on the calculus of functions of several variables. You will learn the meaning of derivatives and integrals for such functions, how to work with them and how to apply them. The topics that we will cover are:

- Geometry of Space and Vectors
- Derivatives of Functions of Two or More Variables
- Multiple Integrals
- Vector Calculus

We will cover chapters 11 to 14 of the textbook. The text material will be discussed in class following as closely as possible the attached schedule. You should read the sections before they are discussed in class. There may be some small changes in the schedule, but the dates of the quizzes and examinations will not change.

Homework and Quizzes: The attached schedule contains assigned homework for each section. These assignments are not to be handed in, but should be worked out on schedule. You should make sure that you can do all the assigned problems. For long assignments with many routine problems this does not mean that you have to work them all, but it means that you should do enough of them to make sure that you can do any problem of that kind. Every Wednesday, starting September 4, during the last 20 minutes of the class, I will give a quiz on the homework for the sections covered by the previous Friday. The questions for the quiz will be selected from the assigned homework problems or very similar problems. Make sure you get all the help you need in doing the homework problems. Feel free to ask questions in class, or to come to my office hours. But on Wednesdays I will not take questions in class on the problems for the quiz that day.

Exams: There will be three midterm exams on Wednesdays September 18, October 23 and November 20, and a comprehensive final exam on Wednesday, December 18, 8:00–10:00 AM, in the usual classroom JTB 130.

Calculators and notes: No calculators will be allowed in quizzes or exams (calculator answers will never be required). All quizzes and exams will be closed book, closed notes, with no paper or electronic devices allowed. All you can have out is the paper provided to you and a pencil or pen to write on it. You can use the back for scratch paper. When appropriate (for example, in the final exam) I will give you a list of formulas you can use.

Tutoring: Starting September 3 there will be free tutoring available in the Mathematics Tutoring Center, located in the T. Benny Rushing Mathematics Center. The hours are:

Monday–Thursday 8:00 AM to 8:00 PM

Friday 8:00 AM to 6:00 PM

Closed weekends and University holidays.

The center also offers group tutoring for groups of 5 or more students who want to meet regularly once a week. You can arrange this at the Center. You can also check <http://www.math.utah.edu/ugrad/mathcenter.html> for more information on tutoring as well as information on the other services offered by the Center. You can also talk to me if you need more information.

Makeups: Since I drop the lowest 3 quizzes and the lowest midterm, there will be no make-ups for quizzes and midterms.

Grading Policy: Grades will be based on the quizzes, midterm and final. Two grades will be computed:

Grade 1: Eleven 20 minute quizzes, drop lowest 3:	30 %
Three 50 minute midterms, drop lowest one:	40 %
One 2 hour final exam (comprehensive):	30 %

Grade 2: Final exam	100%
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If you have taken 8 quizzes and 2 midterms, the final grade will be the larger of Grade 1 and Grade 2. Otherwise your grade will be Grade 1. The grading system will not be any stricter than one letter grade for every 10 points (90-100 A or A-, 80-89 B or B+ or B-, etc).

Important dates: Last day to add classes without permission code: Monday September 2. Last day to drop (delete) classes: Wednesday, September 4. Last day to withdraw from classes: Friday, October 25.

ADA: The Americans with Disabilities Act requires that reasonable accommodations be provided for students with physical, cognitive, systemic, learning, and psychiatric disabilities. Please contact me at the beginning of the semester to discuss any such accommodations you may require for this course.

Schedule

Read By	Section	Homework
W Aug 28	11.1	odd 3–31, 37, 39, 43.
F Aug 30	11.2, start 11.3	11.2: odd 1–19, 23; 11.3: odd 1–17.
M Sep 2	Labor Day	
W Sep 4	11.3	odd 23–33, odd 57–73. Quiz 1.
F Sep 6	11.4	odd 1–25.
M Sep 9	11.5	odd 1–13, odd 19–33, 41, 43.
W Sep 11	11.6	odd 1–11, 15, 17, 25, 27, 29. Quiz 2.
F Sep 13	11.7	1, 3, 7, 9, 13, 29, odd 41–55.
M Sep 16	Review	
W Sep 18	Midterm 1	
F Sep 20	11.8	odd 1–19, 27, 29, 35.
M Sep 23	11.9	odd 1–31.
W Sep 25	12.1	odd 1–21, 25, 27, 33, 35, 41. Quiz 3.
F Sep 27	12.2	odd 1–19, 27, 31.
M Sep 30	12.3	odd 5–29, 33, 35.
W Oct 2	12.4	odd 1–15, 19. Quiz 4.
F Oct 4	12.5	odd 1–25.
M Oct 7	12.6	1, 3, 7, 9, 17, 19, 21, 25.
W Oct 9	12.7	odd 1–29. Quiz 5.
F Oct 11	12.8	odd 1–21, 27, 35, 37, 39.
Fall Break		
M Oct 21	Review	
W Oct 23	Midterm 2	
F Oct 25	12.9	1, 3, 5, 11, 21, 23, 25; redo 15, 17, 21 of 12.8 by Lagrange
M Oct 28	13.1	odd 1–7, odd 15–21, 27.
W Oct 30	13.2	odd 1–27, 37, 39. Quiz 6.
F Nov 1	13.3	odd 1–27, 33, 35, 37, 39.

M Nov 4	13.4	odd 1–27, 33, 35, 37.
W Nov 6	13.5	odd 1–13. Quiz 7.
F Nov 8	13.6	odd 1–15.
M Nov 11	13.7	odd 1–23, 29, 31.
W Nov 13	13.8	odd 1–11, 15, 17, 21, 23. Quiz 8.
F Nov 15	13.9	1, 3, 7, 9, 11, 13, 21, 22 (volume only).
M Nov 18	Review	
W Nov 20	Midterm 3	
F Nov 22	14.1	odd 1–17, 21, 23, 25, 29.
M Nov 25	14.2	odd 1–13, 19, 21, 25.
W Nov 27	14.3	odd 1–19. Quiz 9.
F Nov 29	Thanksgiving	
M Dec 2	14.4	odd 1–15, 19, 23, 27.
W Dec 4	14.5	odd 1–13, 17, 19, 29. Quiz 10.
F Dec 6	14.6	odd 1–13, 19.
M Dec 9	14.7	odd 1–11.
W Dec 11	Catch Up, Review.	Quiz 11.
F Dec 13	Review	
Wed Dec 18	Final Exam 8:00–10:00 AM	