

## MATH 2210-2, CALCULUS III, SPRING 2009

**Classroom:** LCB 219                      **Time:** MWF 8:35 – 9:25  
**Instructor:** Domingo Toledo  
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**Office:** JWB 324                      **Phone:** (801) 581-7824  
**Office Hours:** Mon 9:40–10:30, Wed 10:45–11:35, or by appointment.  
**Web-page:** <http://www.math.utah.edu/~toledo/math2210.html>

**Prerequisite:** Math 1220.

**Textbook:** Varbeg, Purcell and Rigdon, *Calculus*, Ninth Edition.

**Course Description:** This is a course on the calculus of functions of several variables. 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. The main topics will be

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

**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 need not mean that you have to work them all, but it means that you should make sure that you can do any problem of that kind. Every Wednesday, starting January 21, 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 February 4, March 4 and April 1, and a comprehensive final exam on Wednesday, May 6, 8:00–10:00 AM, in the usual classroom LCB 219.

**Tutoring:** Starting January 20 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.

Group tutoring, for groups of at least 5, is also available. Consult with me or the tutoring center on how to arrange for this.

**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:	Ten 20 minute quizzes, drop lowest 3	30 %
	Three 50 minute midterms, drop lowest	40 %
	One 2 hour final exam (comprehensive)	30 %
Grade 2:	Final exam	100%

If you have taken 7 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 drop (delete) classes: Wednesday, January 21. Last day to register: Monday, January 26. Last day to withdraw from classes: Friday, March 6.

**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 Jan 14	11.1	odd 9–31, 37, 39, 43.
F Jan 16	11.2, start 11.3	11.2: odd 1–19, 23; 11.3: odd 1–17.
M Jan 19	Holiday	
W Jan 21	11.3	odd 23–33, odd 57–73. Quiz 1.
F Jan 23	11.4	odd 1–25.
M Jan 26	11.5	odd 1–13, odd 19–33, 41, 43.
W Jan 28	11.6	odd 1–11, 15, 17, 25, 27, 29. Quiz 2.
F Jan 30	11.7	1, 3, 7, 9, 13, 29, odd 41–55.
M Feb 2	Review	
W Feb 4	Midterm	
F Feb 6	11.8	odd 1–19, 27, 29, 35.
M Feb 9	11.9	odd 1–29.
W Feb 11	12.1	odd 1–21, 25, 27, 33, 35. Quiz 3.
F Feb 13	12.2	odd 1–19, 27, 31.
M Feb 16	Holiday	
W Feb 18	12.3	odd 5–29. Quiz 4.
F Feb 20	12.4	odd 1–13, 19.
M Feb 23	12.5	odd 1–13, 17, 21, 23, 25.
W Feb 25	12.6	1, 3, 7, 9, 17, 19, 21, 25. Quiz 5.
F Feb 27	12.7	odd 1–15, 19, 21, 23, 29.
M March 2	Review	
W March 4	Midterm	
F March 6	12.8	odd 1–21, 27, 39.
M March 9	12.9	1, 3, 5, 11, 21, 23, 25; redo 15, 17, 21 of 12.8 by Lagrange
W March 11	13.1	odd 1–7, odd 15–21, 27. Quiz 6.
F March 13	13.2	odd 1–27, 37, 39.

Spring Break

M March 23	13.3	odd 1–27, 33, 35, 37, 39.
W March 25	13.4	odd 1–27, 33, 35, 37. Quiz 7.
F March 27	13.5	odd 1–13.
M March 30	Review	
W April 1	Midterm	
F April 3	13.6	odd 1–11.
M April 6	13.7	odd 1–23, 29, 31.
W April 8	13.8	odd 1–11, 15, 17, 21. Quiz 8.
F April 10	13.9	1, 3, 7, 9, 11, 13, 21, 22 (volume only).
M April 13	14.1	odd 1–17, 21, 23, 29.
W April 15	14.2	odd 1–13, 19, 21, 25. Quiz 9.
F April 17	14.3	odd 1–19.
M April 20	14.4	odd 1–15, 19, 23.
W April 22	14.5	odd 1–13, 17, 19, 29. Quiz 10.
F April 14	14.6	odd 1–13, 19.
M April 27	14.7	odd 1–11.
W April 29	Review	
W May 6	Final Exam 8:00–10:00 AM	