### MATH 10A-010, Calculus: Several Variables

# GENERAL INFORMATION:

Lecture (16046):	TR 2:10 PM - 3:30 PM
Room:	SPR 1340
Instructor:	Muralee (Dr. M. Muraleetharan)
Office:	225 Surge Building
Phone:	(951) 827-6482
E-mail:	muralee@math.ucr.edu
Office hours:	TR 1:00 PM- 2:00 PM, and by appointment

### **Teaching Assistants:**

HIGHFIELD, MATTHEW: Discussion (10A011): M 8:10 AM - 9:00 AM. Room: INTS 1134 KIM, CHUNGHOON: Discussion (10A012): M 7:10 PM - 8:00 PM. Room: WAT 1117 Discussion (10A013): M 3:10 PM - 4:00 PM. Room: INTS 2130 **Textbook:** Vector Calculus by Susan Jane Colley, Third Edition.

#### EXAMS AND GRADING:

Homework:	7 - 8 Homework sets
Midterm exam:	Tuesday $02/09/10$ , during the lecture.
Final exam:	Monday 03/15/10, 11:30 AM - 2:30 PM
Grading:	The final grade is composed of:
	50% of the Final exam grade
	30% of the Midterm exam grade
	20% of the Homework

Your lowest homework score will be dropped.

The following grading scale will be used:

A student with an average of at least 90% will receive a grade of at least A-.

A student with an average of at least 80% will receive a grade of at least B-.

A student with an average of at least 65% will receive a grade of at least C-.

A student with an average of at least 50% will receive a grade of at least D-.

1. The final exam is comprehensive.

2. All exams are closed notes and books. Calculators are not allowed.

3. No make up exams - If you miss the midterm because of a documented medical situation or family emergency, the grade will be computed without taking into account the missed exam.

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## COURSE OUTLINE:

Prerequisites: MATH 009B with a grade of "C-" or better or MATH 09HB with a "C-" or better or equivalent. If you are unsure whether your background is adequate for this course, please make an appointment to discuss this with me immediately.

Topics include Euclidean geometry, matrices and linear functions, determinants, partial derivatives, directional derivatives, Jacobians, gradients, chain rule, and Taylor's theorem for several variables (Chapters 1,2,3,& 4 from the textbook).

**CLASS MEETINGS and ATTENDANCE**: Classes will meet three times each week. Lectures will be given on Tuesday and Thursday. Each section will meet for one discussion each week on Monday. **Attendance is required**.

**COLLABORATION and ACADEMIC INTEGRITY**: Students are encouraged to work cooperatively on practice problems. There is quite a bit of evidence that this sort of collaboration improves performance in mathematics courses. However, all work submitted for grading must be the work of the individual submitting the work. No collaboration is permitted on work submitted for grading. Copying another student's homework is a violation of the University Code of Conduct.

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