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

## GENERAL INFORMATION:

Lecture (16149): TR 8:10 AM - 9:30 AM

Room: SPR 2355

Instructor: Muralee (Dr. M. Muraleetharan)

Office: 225 Surge Building Phone: (951) 827-6482

E-mail: muralee@math.ucr.edu

Office hours: TR 3:00 PM- 4:30 PM, and by appointment

Teaching Assistant: Bennett, Matt

Discussion (10A011): M 10:10 AM - 11:00 AM. Room: SURGE 172 Discussion (10A012): M 12:10 PM - 1:00 PM. Room: INTN 1006 **Textbook:** Vector Calculus by Susan Jane Colley, Third Edition.

## **EXAMS AND GRADING:**

Homework: 9 - 10 Homework sets

Midterm exam: Tuesday 10/27/09, during the lecture. Final exam: Thursday 12/10/2009, 3:00 PM - 6:00 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.

## 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.