## Multivariable Calculus

Math 212 Spring 2006 ©2006 Ron Buckmire Fowler 307 MWF 8:30pm - 9:25am http://faculty.oxy.edu/ron/math/212/06/

## Week 6

Monday February 27 : Exam #1

**Exam #1.** Today is the first in-class exam.

Reading:

Williamson & Trotter, Chapter 1, Chapter 2, Chapter 4, Chapter 5 (Excluding Section 5.5 on Newton's Method)

Wednesday March 1 Class 16:

Multivariable Newton's Method. We'll learn one very important application of the Jacobian matrix: the solution of *nonlinear* systems of equations.

Reading:

Williamson & Trotter, (Section 5.5)

Homework #15: (due in *Class 17*)

Williamson & Trotter, page 250: 1,4 QUIZ #5

Friday March 3 Class 17:

**Gradient Fields and Vector Fields**. We'll introduce the concept of vector fields through the examination of gradient fields.

Reading:

Williamson & Trotter, (Section 6.1)

Homework # 17:

Williamson & Trotter, page 257: 5, 6, 8, 9, 17, 20, 26, 27 page 261: 4, 8, Extra Credit page 259: 38

Quiz #5