## Multivariable Calculus

Math 212 Fall 2005 ©2005 Ron Buckmire Fowler 307 MWF 9:30pm - 10:25am http://faculty.oxy.edu/ron/math/212/05/

## Week 5

Monday September 26 Class 9:

Visualizing functions of several independent variables: understanding surface plots, contour plots, level sets.

Reading:

Williamson & Trotter, (Section 4.2)

Homework #4:

Williamson & Trotter, page 192: # 1, 4, 9, 10, 18 QUIZ #3 DUE

## Wednesday September 28 Class 10:

Partial Derivatives. We'll learn how to take (partial) derivaties of functions of several independent variables.

Reading:

Williamson & Trotter, (Section 4.3)

Homework #4:

Williamson & Trotter, page 203: 3, 9, 12, 22, 25, 31, 34, 37; Extra Credit page 204: # 38, 39

## Friday September 30 Class 11:

Application of Partial Derivatives. We'll learn how to take derivatives of parametrized surfaces and find the equation of tangent planes to a surface.

Reading:

Williamson & Trotter, (Section 4.4)

Homework #5:

Williamson & Trotter, page 210: # 4, 11, 17, 18, 23; page 214: 3, 17, 21, 24 QUIZ #4