Multivariable Calculus

Math 212 Spring 2006 Fowler 307 MWF 8:30pm - 9:25am

 http://faculty.oxy.edu/ron/math/212/06/

Week 4

Monday February 13 *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 #10:

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

Wednesday February 15 *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 #11: (due in *Class 12*)

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

Friday February 17 *Class 12*:

Introduction to Limits of Multivariable Functions. We shall be introduced to some of the most important concepts involving point sets: **neighborhood**, **boundary point**, **limit point** and **interior point**.

Reading:

Williamson & Trotter, (Section 5.1)

Homework #12: (due in *Class 13*)

Williamson & Trotter, page 224: # **2, 3, 4, 5, 8**, 12, 25, 26, 27, 32
Extra Credit page 225: # 42

QUIZ #4