Multivariable Calculus

Week 1

Monday January 23 *Class 1*:

Introduction to Vectors and Vector Spaces. Algebraic Operations on Vectors. Vector Length.

Reading:

Williamson & Trotter, (Section 1.1, 1.2)

Homework #1: (due in *Class 2*)

Williamson & Trotter, Page 7-8 # 2, 3, 7, 8, 9, 22, 25; Page 16-17 # 1, 4, 7, 8, 21, 22

Wednesday January 25 *Class 2*:

Equations of Lines and Planes. Introduction to Parametric Representation of Curves.

Reading:

Williamson & Trotter, (Section 1.3)

Homework #2: (due in *Class 3*)

Williamson & Trotter, Page 23-24 # 1, 2, 5, 8, 9, 11, 12, 15, 17, 19

Friday January 27 *Class 3*:

Introduction to the Dot Product.

Reading:

Williamson & Trotter, (Section 1.4, 1.5)

Homework #3: (due in *Class 4*)

Williamson & Trotter, Page 31-32 # 5, 6, 7, 8, 9, 18, 21, 22, 27;

QUIZ #1