Week 9

Monday March 27 : *Class 21*:

Extrema of Multivariable Functions, part 2. We'll continue our study of multivariable optimization by learning about the analogue to the "Second Derivative Test" on maxima/minima.

Reading:

Williamson & Trotter, (Section 6.4)

Homework #20:

Williamson & Trotter, page 298: **7, 8, 12, 13** Extra Credit page 298: 15.

Quiz #7 DUE

Wednesday March 29 *Class 22*

Curvilinear Coordinates. We'll examine the various curvilinear coordinate systems right before we begin Multiple Integration, where these coordinate transformations play an important role.

Reading:

Williamson & Trotter, (Section 6.5)

Homework #21:

Williamson & Trotter, page 308: 3, 4, 6, 7, **9, 10**, 12. EXTRA CREDIT page 309: 15; Chapter 6 Review: page 310, 10, 21, **29, 30, 36, 37** EXTRA CREDIT page 310: 16, 33, 38.

Friday March 31 *Class 23*:

Introduction to Multiple Integration. We'll learn how to computer iterated (repeated) integrals over rectangular and non-rectangular regions.

Reading:

Williamson & Trotter, (Section 7.1)

Homework #22:

Williamson & Trotter, page 321: 3,4,5,**6,7**,11,12,**16,17,21**
Extra Credit page 322: 24, 29

Quiz # 8