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# Multivariable Calculus

Math 212 Fall 2005

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Fowler 307 MWF 9:30pm - 10:25am

<http://faculty.oxy.edu/ron/math/212/05/>

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## Week 11

Monday November 7 *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 #9:

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**

**Quiz #8 DUE**

Wednesday November 9 *Class 23:*

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

Reading:

Williamson & Trotter, (Section 7.1)

Homework #9:

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

Friday November 11 *Class 24:*

**Multiple Integration.** We'll continue our study of integration of multivariable functions in 2 and 3 dimensions.

Reading:

Williamson & Trotter, (Section 7.2)

Homework #9:

Williamson & Trotter, page 332: 1,2,9,11,13  
**Extra Credit page 333: 17**

Quiz #9