Differential Equations

Math 341 Fall 2010 ©2010 Ron Buckmire Fowler 307 MWF 2:30pm - 3:25pm http://faculty.oxy.edu/ron/math/341/10/

Week 4

Monday September 20 Class 8:

Linear Differential Equations. We will learn about the Linearity Principle and how it helps us to solve an entire clas of ODEs.

Reading:

Blanchard, Section 1.8

Homework #8:

Blanchard, Section 1.8: 4, 5, 8, 9, 17, 18, 20.

Wednesday September 22 : Class 9:

Integrating Factors. We will learn a very cool analytical technique for obtaining a formula for solutions of linear ODEs.

Reading:

Blanchard, Section 1.9

Homework #9:

Blanchard, Section 1.9: 4, 5, 9, 12, 19

Friday September 24 Class 10:

First Order Systems of ODEs. We will be introduced to models that involve a system of first order differential equations.

Reading:

Blanchard, 2.1

Homework #10:

Blanchard, Chapter 1 Review: 3, 4, 6, 10, 11, 12, 29, 47

Take Home Quiz #2