Differential Equations

Math 341 Fall 2008 ©2008 Ron Buckmire Fowler 307 MWF 2:30pm - 3:25pm http://faculty.oxy.edu/ron/math/341/08/

Week 4

Monday September 15 Class 7:

Bifurcations. We will learn about a modern analytical technique which allows one to analyze differential equations which contain parameters.

Reading:

Blanchard, Section 1.7

Homework #7:

Blanchard, Section 1.7: 3, 6, 8, 12, 15. Quiz #2 Due

Wednesday September 17 : 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.

Friday September 19 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