# Differential Equations

Math 341 Fall 2013 ©2013 Ron Buckmire Fowler 307 MWF 12:50pm - 1:45pm http://faculty.oxy.edu/ron/math/341/13/

## Week 5

Monday September 23: Buckmire absent

Wednesday September 25: Worksheet 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, 10, 13, 18.

#### Friday September 27 Worksheet 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, 8, 9, 17, 18, 20, 31\*.

#### Quiz #3:

Take-home Quiz on Bifurcation.