Differential Equations

Math 341 Fall 2009 © 2009 Ron Buckmire

Fowler 110 MWF 2:30pm - 3:25pm http://faculty.oxy.edu/ron/math/341/09/

Week 1

Wednesday September 2 Class 1:

Modeling Using Differential Equations. We will introduce (or review) the use of differential equations in the modelling of real world phenomena by examining some common (very simple) models and corresponding differential equations.

Reading:

Blanchard, Section 1.1

Homework #1:

Blanchard, Section 1.1: 3, 4, 8, 11.

Friday September 4 Class 2:

Separation of Variables. We will revisit an analytical technique for solving a class of first-order differential equations of the form y'(x) = f(y)g(x) called separation of variables you may have previously seen in Calculus.

Reading:

Blanchard, Section 1.2

Homework #2:

Blanchard, Section 1.2: 1, 2, 3, 6, 25, 27, 32.