## Differential Equations

Math 341 Fall 2008
(C)2008 Ron Buckmire

Fowler 307 MWF 2:30pm - 3:25pm
http://faculty.oxy.edu/ron/math/341/08/

## Week 12

Monday November 10 : Worksheet 28

Laplace Transforms. We shall be introduced to a new method for solving differential equations that involves an integral transform.

Reading:
Blanchard, Section 6.1
Homework \#27:
Blanchard, Section 6.1: 2, 3, 4, 6, 7, 8, 12, 13, 16, 17.

Wednesday November 12: Worksheet 29
Laplace Transforms and the Heaviside Function. We shall continue our use of Laplace Transforms by considering discontinuous functions.

Reading:
Blanchard, 6.2
Homework \#28:
Blanchard, Section 6.2: 1, 2, 3, 5, 8, 16.

Friday November 14 : Worksheet 30

Laplace Transform and Second-Order Equations. We shall learn how to apply Laplace Transforms to solve second-order ordinary differential equations of the form $y^{\prime \prime}+p y^{\prime}+q y=f(t)$.

Reading:
Blanchard, Section 6.3
$\underline{\text { Homework \#29: }}$
Blanchard, Section 6.3: 5, 6, 8, 9, 10, 15, 18, 27, 28.
Quiz:
Take-Home Quiz \#7.

