
Differential Equations

Math 341 Fall 2009
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Fowler 110 MWF 2:30pm - 3:25pm
<http://faculty.oxy.edu/ron/math/341/09/>

Week 3

Monday September 14 : *Class 5:*

Existence and Uniqueness Theorem. We will investigate the conditions which guarantee existence and/or uniqueness of solutions to the initial value problem $y' = f(t, y)$, $y(t_0) = y_0$.

Reading:

Blanchard, 1.5

Homework #5:

Blanchard, Section 1.5: 2, 3, 12, 14, 15.

Quiz #1 DUE

Wednesday September 16 : *Class 6:*

Phase Lines and Classification of Equilibria. We will continue our qualitative analysis of differential equations by learning how to use **phase lines** and the classification of equilibrium points.

Reading:

Blanchard, Section 1.6

Homework #6:

Blanchard, Section 1.6: 2, 7, 8, 19, 20, 30, 31, 41.

Friday September 18 : **Buckmire Out Of Town**

Class Cancelled. I would encourage you to read section 1.7 and check the website for a bonus quiz!

Reading:

Blanchard, Section 1.7