
Differential Equations

Math 341 Fall 2010
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Fowler 110 MWF 2:30pm - 3:25pm
<http://faculty.oxy.edu/ron/math/341/10/>

Week 7

Monday October 11 : *Exam #1*

First Order DEs and First-Order Systems. The first exam is on the material in the first two chapters of Blanchard, Devaney & Hall.

Reading:

Blanchard, Chapter 1 and Chapter 2

Wednesday October 13 : *Worksheet 15*

Linear System of ODEs. Yay, matrices are back. We will begin to analyze systems for ODEs which have the form $\frac{d\vec{x}}{dt} = A\vec{x}$. There are some very cool ideas in this chapter!

Reading:

Blanchard, 3.1

Homework #15:

Blanchard, Section 3.1: 7, 8, 14, 15.

Friday October 15 : *Worksheet 16*

Straight Line Solutions. Eigenvalues and eigenvectors return and are important in the case where Linear Systems of ODEs have solutions that look like straight lines.

Reading:

Blanchard, Section 3.2

Homework #16:

Blanchard, Section 3.2: 6, 11, 15, 16, 18.