
Differential Equations

Math 341 Spring 2005
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MWF 8:30 - 9:25am Fowler North 2
<http://faculty.oxy.edu/ron/math/341>

Week 10

Monday March 28: *Class 23:*

Matrix Exponential. We will conclude our look at linear systems of DEs by analyzing the matrix exponential function e^{At} .

Reading:

Zill, (Section 8.4)

Homework Set # 9: (*due Friday April 1*)

Zill, Section 8.4: 1*, 2*, 5*, 23* *EXTRA CREDIT 26*

Zill, Chapter 8 In Review: 3*, 4*, 11*, 15*

Quiz #8 DUE

Wednesday March 30 *Class 24:*

Laplace Transforms. We will introduce the fascinating topic of integral transforms as a technique for solving differential equations, beginning with the Laplace Transform.

Reading:

Zill, (Section 7.1)

Homework Set #10: (*due Friday April 8*)

Zill, Section 7.1: 4*, 9*, 11*, 20* *EXTRA CREDIT 41*

EXAM 1 Returned

Friday April 1 *Class 25:*

Inverse Laplace Transform. In order to actually obtain any solutions of a DE using Laplace Transforms we need to be able to use the Inverse Laplace Transform.

Reading:

Zill, (Section 7.2)

Homework Set # 10: (*due Friday April 15*)

Zill, Section 7.2: 2*, 7*, 11*, 25*, 41* *EXTRA CREDIT 42*

Quiz #9