Differential Equations

Math 341 Fall 2009 © 2009 Ron Buckmire

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

Worksheet 26: Wednesday November 18

TITLE Review for Exam #2

CURRENT READING Blanchard, 3.1-3.7 and 5.1-5.3

Homework Assignments due Wednesday November 18

Section 5.4: 2, 13, 14, 16, 17, 19.

Chapter 5 Review: 3, 4, 5, 6, 7, 8, 11, 12, 25, 27, 28.

SUMMARY

We shall review the topics for Exam #2 (Chapter 3 and Chapter 5).

Hamiltonian Systems

Qualitative Analysis of Systems

The Linearization Technique

Trace-Determinant Plane

Second-Order Linear ODEs

Linear Systems of ODEs with Repeated Eigenvalues or Eigenvalues Equal to Zero

Linear Systems of ODEs with Complex Eigenvalues

Linear Systems of ODEs with Real Eigenvalues

Straight Line Solutions

Linear Systems of ODEs