

Math 1270 Ordinary Differential Equations

Spring 2014 University of Pittsburgh

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Lectures: T.Th. 7:20-8:35 pm in 627 Thackeray Hall.

Office Hours: T.Th. 8:35-10:00 pm in 404 Thackeray Hall or by appointment.

Course Description

This course covers the theory of ordinary differential equations (ODEs) at the undergraduate level. We will cover Chapter 1,2,3,7,8,9 (and Chapter 6 if time allows) of the textbook. The topics include classical methods of solving first order ODEs, linear higher-order ODEs and systems of first order linear and nonlinear ODEs. Geometric qualitative methods for autonomous systems of first order ODEs and solution of boundary value problems will be briefly discussed.

Prerequisite

Calculus 2 (Math 0230) and Linear algebra (Math 0280 or Math 1180).

Text

Elementary Differential Equations and Boundary Value Problems, 9th edition by Boyce & DiPrima, *John Wiley & Sons*, 2009. ISBN 9780470383346 (available at the Book Center on Fifth Ave.)

Grades

Your final letter grade will be determined according to the following weights:

Homework assignments	20%
Two Midterm Exams	50% (25% each)
Final Exam	30%

We will have weekly homeworks assigned after each Thursday's class and due on the next next Tuesday's class. You are required to do each homework assignment independently.

We will have TWO in-class midterm exams on Tuesday 2/4 and Tuesday 3/18 (please mark your calendar). No make-up midterm exam will be given. However, in the case of a *well-documented* medical emergency, your scores on the missing midterm exam will be prorated by your another midterm exam and the final exam.

All exams are closed-book and closed-notes. No formula sheet or graphic calculator is allowed during the exams.

Courseweb

I will put announcements, exams answers and other useful materials on the courseweb. It is your responsibility to check the courseweb in time.

Disability Resource Services

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services, 140 William Pitt Union, 412-648-7890 as early as possible in the term.