

MA214 Sec 001 Calculus IV:
Ordinary Differential Equations Fall 2011

Instructor:	Leonardo Marazzi
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Text: . E. Boyce and R. C. DiPrima:	<i>Elementary Differential Equations and Boundary Value Problems</i> , 8 th Edition, Wiley 2005
Class Meetings:	MWF 8:00–8:50PM CB 345
Office Hours:	M 4-5; F 4-5 and by appointment
Course material and information	Blackboard

Grading Policy

Item	Date	Total Points
10 Quizzes at 10 points each	approximately every week	100
First Hour Exam	30 September (target)	100
Second Hour Exam	4 November (target)	100
Final Exam	14 December, 1:00-2:00 PM	200
TOTAL		500

The minimum cut-offs for letter grades are: A 450-500; B 400-449; C 350-399; D 300-349; E below 300. If your final total of all scores is within one of these intervals, you are guaranteed to receive the corresponding letter grade or higher. Homework will be assigned every class period. *Cheating in any form will not be tolerated.*

Course Content

MA214 is a basic course in *ordinary differential equations*. The basic problem is to determine an unknown function from an equation that involves only the derivatives of the function. Differential equations are used to model a wide variety of physical and biological phenomena, from atoms to animal populations. We'll study basic equations for which the unknown function—the solution—depends on one real variable only, like time or position. This is the meaning of the adjective *ordinary*. We will study first- and second-order ordinary differential equations extensively, especially linear differential equations. We will discuss applications of the equations and some numerical approximation schemes for their solutions. Approximate course material: Chapter 1, Chapter 2 (sections 2.1, 2.2, 2.3, 2.5, 2.7), Chapter 3, and Chapter 6.

This is a **paperless** class to the extent possible. Homework problems and practice exams will be posted on blackboard. Please consult it regularly.

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Special Dates in Fall 2011

5 September	Labor Day - No classes
14 September	Last day to drop with no W
17 October	Midterm of Fall 2011 Semester
4 November	Last day to withdraw from a course
23-26 November	Thanksgiving Break - No Classes
9 December	Last Class
14 December	1:00-2:00 PM Final Exam