

## Syllabus for Math 111, Fall 2011

### Ordinary Differential Equations

Please read this syllabus carefully. You will be responsible for all the information given here, and for any modifications to it that may be announced in class. Updated information and handouts can be accessed at my website: [www.math.ohio-state.edu/~kao/](http://www.math.ohio-state.edu/~kao/)

**Instructor:** Chiu-Yen Kao

**Texts:** (1) Elementary Differential Equations and Boundary Value Problems, 9th Ed. By Boyce and DiPrima

**Lecture:** MWF 9:00am @ RHN 12

**Course Description:** An introduction to the general theory and applications of differential equations. Linear systems, nonlinear systems, and stability. Prerequisite: Mathematics 32. (Students may not receive credit for both Mathematics 110 and 111.)

**Office Hours:** MWF 10:00-11:00am @ Adams 206 and by appointment

**E-mails:** [Ckao@claremontmckenna.edu](mailto:Ckao@claremontmckenna.edu) or [kao@math.ohio-state.edu](mailto:kao@math.ohio-state.edu)

**Tentative Schedule:** (See my website for detail schedule)

Ch 1 Introduction

Ch 2 First Order Differential Equations

Ch 3.1 - 3.2 Second Order Linear Equations

-----first midterm

Ch 3.3 - 3.8 Second Order Linear Equations

Ch 4 Higher Order Linear Equations

Ch 6 The Laplace Transform

-----second midterm

Ch 7 System of First Order Linear Equations

-----final exam

**Grading:** midterm (Wed. Sept 28, 20%, Fri. Nov 11, 20%), final exam (Wed. Dec 14 9:00am, 30%), class participation (5%), and homework and quiz (25%). The letter grade will be with an approximately 90(A)-80(B)-70(C)-60(D) scale.

**Class Participation:** You are expected to attend all lectures, and are responsible for all information given out during them. Excessive absences without any medical reasons will result in points lost from your class participation grade. Activities such as sleeping, reading, listening to headsets, browsing the web, conversing with other students, and so on do not constitute class participation. Students engaging in such behavior during the lecture will be counted as absent.

**Homework:** I encourage students to discuss HW with each other. However, you should still write your own answers. No late HW will be accepted.

**Examination:** final exam will be held on Wed, Dec 14, 9:00am. University regulations require that you take it at that time. It will cover all sections listed in the class schedule. All tests must be taken at the scheduled times, except in extraordinary circumstances. If you cannot take a test at the scheduled time, you should contact me in advance. Check the grading of your exams carefully when they are returned; all grading errors should be brought to my attention as soon as possible. **No calculators will be allowed during any exams.**

**\*Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. If you have any other questions related to Disability Support Services at Claremont McKenna College, please contact Julia Easley in the Dean of Students Office at 909-621-8114**  
**<http://www.cmc.edu/dos/DSS/disabilitysupport.php>**