## MATH 3113–Section 006 Intro to Ordinary Differential Equations

This handout describes the syllabus and organization of the Introduction to Ordinary Differential Equations course, Math 3113–006, for the Fall Semester 2003. It is your responsibility to acquaint yourself with all the information in this handout, and with any modifications to it that may be announced in class.

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Course Web Page: http://math.ou.edu/~nbrady/teaching/f03-3113 Office Hours: Tue: 9:15–10:15am, Wed: 10:00–11:00am, Thu: 9:00–10:00am.

**Text and Course Outline:** The textbook for this course is *Differential Equations and Boundary Value Problems* (3<sup>rd</sup> edition), by C. Henry Edwards and David E. Penney.

We will cover most sections of Chapters 1 through 5, and will pick topics from the remaining chapters according to class needs. We will not assume familiarity with matrices and linear transformations in Chapter 5 (linear systems), and so all the eigenvalues/eigenvectors techniques will be developed within the course.

It is very important to refresh your knowledge of the early semesters of the calculus sequence (particularly Calculus I–II). In particular, you should be able to differentiate and integrate fairly readily. Quiz I is designed to reinforce this point; you may be asked to check that a function is a solution to a differential equation (involves differentiation) or find a solution to a simple equation of the form y' = f(x) (involves integration).

**Lectures:** You are expected to attend all lectures, and are responsible for all information given out during them. In particular, this includes any changes to the quiz/midterm dates or content. As in any course, you should try to read the relevant sections of the textbook **before** attending lectures.

**Grading Scheme:** Grades will be assigned by weighting your totals from Homeworks, Quizzes, Midterms, and a Final Examination as follows:

Homeworks	15%
Quizzes	6%
Midterm Total	54%
Final Examination	25%

Here is a detailed description of each of these components. The total number of points in the course is 100.

**Homework:** Homework will be due at the **start** of class on Thursdays. You are responsible for ensuring that your homework gets turned in on time. Late homework will not be accepted; it upsets the grading process and is unfair to other students.

The homework assignments are there to provide you with a **minimum** level of exposure to the materials outside of class time. You will need to do many more problems before you feel comfortable with the concepts involved. Take it from experience (of generations of students!) that the way to succeed in a math course is to work (and understand) a large number of problems.

**Quizzes:** Three 10-minute Quizzes are held in class during regular lecture times. Here are the quiz dates.

Quiz 1: Tuesday, Sept. 2.Quiz 2: Tuesday, Oct. 7.Quiz 3: Tuesday, Nov. 11.

**Midterms:** There are three midterms, which are held in the classroom during regular lecture times.

Midterm 1: Thursday, Sept. 18.Midterm 2: Thursday, Oct. 23.Midterm 3: Thursday, Dec. 4.

**Final Examination:** The final examination is cumulative. It is scheduled for Friday, December 19 from 1:30pm until 3:30pm, and is held in the usual classroom — PHSC 114.

Taking Examinations: Here are a few notes on taking Examinations.

- I will hold extra Office Hours and/or schedule Review Sessions before the Midterms and Final Examinations. You are strongly encouraged to attend the Review Sessions, and to attend Office Hours regularly.
- You cannot use calculators/computers, books or any type of notes during the examinations.
- All examinations must be taken at scheduled times, except in very extreme circumstances. So be careful not to make travel arrangements that conflict with examination times. If you cannot take an examination at a scheduled time, you should contact me well in advance of the test time. Otherwise, an absence at an exam will result in a score of zero.

**Policy on W/I Grades:** Until September 8, there is no record of grade for dropped courses. From September 9 through October 3, you may withdraw and receive an automatic W grade, *no matter what scores you have so far achieved*. From October 6 onward you will need to see me about grades if you wish to withdraw. From November 3 on, University regulations specify that you may withdraw only with the permission of the Dean.

Students who are failing the course should not expect to receive an I grade in place of a W grade. I will only consider assigning an I grade if the student is already maintaining a passing grade, has completed most of the course work, and can demonstrate that he/she is unable to complete the work at this time due to circumstances beyond their control.

Academic misconduct: Students should acquaint themselves with the Provost's Academic Integrity Guide which can be found on-line at the following address. www.ou.edu/provost/integrity.

Accommodation of Disabilities: Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible to discuss the accommodations necessary to facilitate his or her educational opportunity and ensure his or her full participation in the course.