

MA 481G: DIFFERENTIAL EQUATIONS I (FALL 2008)

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DEPARTMENT OF MATHEMATICS

Basic Information

- **Time & Place:** MWF 12:00–12:50 PM in CB 345.
- **Instructor:** Dr. M.E. Jabbour, POT 729, 7-8836, jabbour@ms.uky.edu.
- **Office Hours:** MWF 11:00–11:50 AM (or by appointment), POT 729.
- **Exams:** There will be *two* exams and *one* final. Whereas the final's date is *definitive*, the dates listed below for the two exams are *tentative* and are subject to change according to the pace at which the lectures will proceed:
 - **1-st Exam:** Wednesday, October 08, 12:00–12:50 PM in CB 345.
 - **2-nd Exam:** Monday, November 10, 12:00–12:50 PM in CB 345.
 - **Final:** Wednesday, December 17, 10:30 AM–12:30 PM in CB 345.

No makeup exams will be given unless your absence is due to a *documented* illness. All exams are *cumulative*: you are expected to master all the material covered up to the exam's date.

Material

- **Textbook:** *An Introduction to Ordinary Differential Equations* by Earl A. Coddington, Dover, ISBN 0-486-65942-9.
- **Abstract:** This is a one-semester introduction to the mathematical theory of ordinary differential equations (ODE's). You are expected to have some knowledge of advanced calculus (particularly, complex numbers and complex-valued functions). A certain amount of mathematical rigor will be implemented: all significant results will be stated as theorems and careful proofs will be given where necessary. Roughly, emphasis will be placed on the general properties of linear and non-linear ODE's and their solutions.
- **Topics:** We will try to cover the chapters of *Coddington* listed below. Ideally, I'd like to move forward at the pace of (at least) one section per lecture but this will very much depend on how quickly you're able to digest the material that you're being exposed to. Hence the importance