

**MATH 267 (Differential Equations and Transforms) Syllabus Spring 2007;
Section E1**

Location and Time CARVER 0282, MTRF 2:10-3:00 PM

Instructor: Domenico D'Alessandro

Department of Mathematics

440 Carver Hall

e-mail: daless@iastate.edu

<http://www.public.iastate.edu/~daless/> (Web page where to find communications for the course and/or course material)

Office Hours: M 3:00-4:00 PM, T 5:00-6:00 PM, F 3:00-4:00 PM (in Carver 440).

Textbook: Elementary Differential Equations and Boundary Value Problems (8th Ed.) , by W. Boyce and R. DiPrima .

Course Content:

- PART I: First Order Differential Equations and Applications. Existence and Uniqueness Theorem: Chapter 2.
- PART II: Second and Higher Order Linear Equations: Chapters 3 and 4.
- PART III: Laplace Transform based Solutions of Differential Equations. Review of Linear Algebra (Chapter 6 and Sections 7.1-7.3)
- PART IV: Systems of Differential Equations. (Sections 7.4-7.9 and Chapter 9)

Hour Exams There will be **four** one hour exams, in class, during regular hours. Each exam will cover one of the of the four parts of the course except the fourth exam which will be on *most* but not all of PART IV.

Homework: Assigned roughly every week. A typical homework assignment consists of 1) A suggested reading highlighting the parts of the book that have been covered in class (and the parts that can be skipped) 2) Some suggested problems for which the answers can be found in the book. 3) Problems for which the solution is not in the book. These problems will have to be handed in on the due date and will be graded. The solutions will be discussed in class.

You are allowed to form **teams** to do the homework and to hand in one homework for each team. Team must consist of no more than 4 people and must be the same throughout the semester. Teams must be formed within the first four homework assignments. You are allowed to leave a team during the semester but you cannot leave a team and join another team.

Final Exam: As scheduled.

Grade: 20/100 HWK, 55/100 Hour exams, 25/100 Final, (Lowest Hour Exam score and Lowest Two Homework scores will be dropped), Calculators are allowed during tests and Final exam. Late Homework will not be accepted. No Make up exams. Special arrangements can be considered only for the final exam. Please contact the instructor in due time.