MATH 246 SECTION 0101 (Fall 2002)
ORDINARY DIFFERENTIAL EQUATIONS
FOR SCIENTISTS AND ENGINEERRS
MTH B0421 MWF 9:00-9:50

Instructor

Dr. Daniel KESSLER
Office MTH 4113, Office hours: MW 10-11, Phone: 55079
E-mail: kessler@math.umd.edu

Webpage

http://www.math.umd.edu/~kessler/246/

Syllabus

		BDP	CHLOS	#lectures
I	Intoduction	1	1-4	1
II	First order equations	2	5-6	9
III	Numerical methods	8	7-8	3
IV	Second order equations	3	9	9
V	Laplace transforms	6	11	4
VI	Systems of first order linear equations	7	12	6
VII	Nonlinear systems and stability	9	13	7

Books

BDP: *Elementary Differential Equations* 7th ed., by Boyce & DiPrima
CHLOS: *Differential Equations with MATLAB*, by Coombes, Hunt, Lipsman, Osborn, and Stuck, published by J. Wiley

Homework

A list of homework exercises will be given. Students are strongly encouraged to do all exercises. Homework will not be collected, but quizzes will test that homework was done and understood. Additionaly, students will be asked to do several projects in Matlab. Teamwork is encouraged, but students will have to write individual reports. Overall, students are expected to spend at least 2 hours working on Math 246 outside of class for every hour in class, which translates to *at least* 6 hours per week.

Grading policy

Quizzes(homework): 10%, Matlab: 20%, Midterm exams: 40%, Final exam: 30%
   Quizzes: There will be several 10 minute quizzes at random dates. Quizzes will reproduce homework exercises.
   Matlab: There will be five Matlab assignements. The first one will be corrected but not graded. Students are encouraged to work in small teams but must turn in in individual reports. Due dates for the problem sets will be: Set A: Sep 13; Set B: Oct 4; Set C: Oct 18; Set D: Nov 8; Set F: Dec 11
   Midterm exams: No electronic devices will be allowed during exams. The dates will be: Exam 1: Sep 27; Exam 2: Nov 1; Exam 3: Dec 6
   Common final exam: A final exam common to all sections will be held on the week from Dec 16 to Dec 21.