

## Course Outline

### MATH 246    Spring 2011    M. Jakobson

Office: Math 3317    Phone: (301)405-5152  
E-mail [mvy@math.umd.edu](mailto:mvy@math.umd.edu)  
<http://www-users.math.umd.edu/~mvy>  
Office hours :  
TTh 10 - 10:50

**Prerequisite:** Math 141 or equivalent

**Texts:** Boyce & DiPrima, *Elementary Differential Equations*, 9-th ed. [B&DiP]  
BHunt *et. al.*, *Differential Equations with MATLAB*, 2nd ed. [DEwM]

#### **Syllabus:**

<u>Chapter in B&amp;DiP</u>	<u>Sections</u>	<u>Corresponding Chapters in DEwM</u>
1	1-3	1-4
2	1-8	5-6
8	1-2	7-8
3	1-8	10
6	1-4	12
7	1-8	13
9	1-4	14

**Homework:** Homework problems from the text will be assigned, but *not* collected. Selected problems will be discussed in class.

**MATLAB:** The mathematical software package *MATLAB* is an important element of the course. We will use *MATLAB* in analyzing and producing solutions of differential equations. Instructions for using *MATLAB* are presented in DEwM .

**Collaboration:** You'll work together in small groups on the *MATLAB* problem sets. Then you'll hand in a single solution to the problem set with the names of all group members on it.

NOTE: This policy commences with Problem Set B. Everyone is expected to do Problem Set A on their own.

**Grading:** There will be a total of 600 points available in the course, allocated as follows.

1. Two exams, each worth 100 points, see tentative dates below.
2. Several quizzes worth total 100 points.
3. Five graded *MATLAB* assignments, each worth 20 points. Tentative due dates for the submission of these problem sets are provided below.
4. Please note that for a makeup a written explanation from a doctor will need to be provided. With the proper explanation the next test/ Final will be the makeup : i.e. the grade will be scaled up to reflect the missing score.
5. A 2-hour cumulative final exam worth 200 points.
6. The grades will be awarded by  
90%+ A, 80-89% B, 70-79% C, 60-69% D, 0-59% F.

**Tentative Schedule of Exams and *MATLAB* Assignment Due Dates**

<u>Exam or Assignment</u>	<u>Date</u>
Problem Set A	2/01
Problem Set B	2/15
Exam # 1	2/22
Problem Set C	3/08
Exam # 2	3/29
Problem Set D	4/5
Problem Set F	5/03