

UNIVERSITY OF DELAWARE
Department of Mathematical Sciences
Math 351-013 — Engineering Mathematics I — Fall 2008

Instructor

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Text

Advance Engineering Mathematics, *3rd Edition* by D.G. Zill and M.R. Cullen

Assignments and Grading

- Homework assignments 100 pts;
2 of 50-minute exams 100 pts each;
Final exam 200 pts;
 \pm grading will be used. The grading will be roughly based on $A^- \geq 90\%$, $B^- \geq 80\%$, $C^- \geq 70\%$, $D^- \geq 60\%$, $F < 60\%$.
- Several homework sets will be handed in and graded. Late homework will NOT be accepted. If you miss a class it is your responsibility to find out if any assignment was given. Neatness counts; illegible work will earn a low grade.
- The hourly exams will be held during a regular lecture period. The date of the exams and the material to be covered will be announced at least 10 days in advance.
No make-up exams will be given unless mandated by University policy. If a make-up is approved, the grade on the final exam will be substituted for the missing grade.

Office hours

Tuesdays 10:45-12:00, Wednesdays 9:30-11:00 or by appointment.

Electronic Communication

The Web page for this course is listed on the top of the first page. There you will find copies of handouts available for downloading as well as any important announcements. Particularly important messages and homework assignments will be e-mailed to you directly. In addition, you may send me e-mail with questions regarding the course.

Topics

The material covered in this course is included in the listed sections. Not everything in those sections will be necessarily discussed in class.

1. Part 1: Ordinary Differential equations

- (a) Introduction to Differential Equations: 1.1, 1.2, 1.3
- (b) First-Order Differential Equations: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
- (c) Higher-Order Differential Equations: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9

2. Part 2: Vectors and Matrices

- (a) Vectors: 7.1, 7.2, 7.3, 7.5, 7.6, 7.7
- (b) Matrices: 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.12, 8.15

3. Part 3: Systems of Differential Equations

- (a) Systems of Linear Differential Equations: 10.1, 10.2, 10.3, 10.4, 10.5

Academic Honesty

The University has explicit rules on academic honesty that will be strictly enforced in class. See for details

<http://www.udel.edu/stuguide/06-07/code.html#honesty>