

Math 2650 - Linear Differential Equations

Fall 2007

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Office Hours: Tue., Th. 9:30–11:00, Wed. 9:30–10:30, and *and by appointment*. See the web for the most up-to-date office hours.

Bulletin Description: Math 2650 - Linear Differential Equations (3). Lec. 3. Coreq., Math 2630. First and second order linear differential equations including the solutions by infinite series, applications.

Text: H. Ricardo, *A Modern Introduction to Ordinary Differential Equations*, Houghton Mifflin, Boston, 2003.

Coverage: Parts of Chapters 1–4, 6, and additional topics. In particular we will cover sections 1.1, 1.2., 2.1–2.5, 2.7, exact differential equations, 3.1, 4.1–4.3, method of undetermined coefficients, 6.1–6.3, solving differential equations by means of the Laplace transform (discontinuous forcing terms and RLC-circuits), power series expansion.

Homework and Computer Projects: Homework will be assigned regularly, and the students are expected to do the homework in a timely manner. Only selected homework will be collected. In addition small projects that require the use of a symbolic algebra package will be assigned (this software is accessible from the computer labs in Parker Hall and the School of Engineering). Detailed instructions will be provided and no prior experience with the software is needed. These projects will be collected for grading and their grades will be counted towards the final grade..

Computer Labs: Some class sessions may be held in a computer lab. Attendance in these labs is mandatory. You must have an active AU OIT computer account.

Student E-mail Policy: E-mail is considered an official medium for communicating with students. All students are responsible for checking their Auburn University issued e-mail account in a timely fashion and on a regular basis (at least once a day) claiming not to have seen an e-mail message on time will be not a valid excuse. The official e-mail system for students is identified by `user@auburn.edu` and can be accessed via TigerMail, or any other IMAP-type client.

Exams: There will be a Calculus review exam on Tuesday August 21. There will also be two one-hour exams and a final exam. Tests will be announced at least three days in advance. Make up tests will not be given unless a special circumstance exists. Refer to the Tiger Cub for a description of what constitutes an acceptable excuse. If at all possible, excuses have to be brought in advance; only in the case of an emergency, they must be submitted as soon as the situation allows (normally no later than on the first class day following the excused absence). Tentative (one-hour exam) test dates are: Tuesday October 2, and Thursday November 29.

Grading: The two hour exams will count as 25% of the course grade each, the homework and projects will count as 15% (Calculus review exam will contribute to homework grade), and the final exam grade will count as 35% of the course grade (grading scale is: 90–100%, 80–89%, 70–79%, 60–69%, and 0–59%, A, B, C, D, and F, respectively).

Honesty: Giving or receiving aid in whatever form on an exam will result in a score of zero and may lead to Honesty Board proceedings. Refer to the Tiger Cub for information on university policies governing this matter.

Cell Phone Policy: Cell phones must be turned off during class and exam periods.

Registration: It is your responsibility to make sure that you are properly registered for this particular section of Math 2650 (section 86), Tuesday, Thursday, 8:00–9:15, 250 Parker Hall.

Important Dates: The 15th class day (last day to withdraw from a course with no grade assignment) is September 6. Mid Semester (last day to withdraw from a course with no grade penalty) is October 8. Classes end December 6.