

MATHEMATICS 231- DIFFERENTIAL EQUATIONS-SPRING 2009

Time and place: Tu+Th, 11:10-12:25 (Section 3), 2:10-3:25 (Section 5), Aconda 113A

Instructor: Dr. A. Freire, Aconda 406B, office phone: 974-4313

e-mail: freire@math.utk.edu, web page: <http://www.math.utk.edu/~freire>

Office hours: after class- Tu+Th: 4:30-5:00, or by appointment (send me an e-mail)

Goal and prerequisites: First course on differential equations, intended primarily for students in science and engineering. Prerequisite: one year of calculus of one variable.

Textbook (required): *Ordinary Differential Equations*, by Morris Tenenbaum and Harry Pollard (1963); Dover Ed. (1985) – \$24.95 (new) at the UTK bookstore.

COURSE POLICIES

1. *Attendance:* students are expected to come to every class. Each lecture will include new material, sometimes not found in the text. (**Take notes!**) I will take attendance, and missing too many classes will affect your grade.
2. *Course log:* This link to the course web page will contain a brief listing of the material covered in each lecture, handouts (including material not found in the text) and homework problems. It will be updated after every class and should be consulted often.
3. The most important concepts and examples for each topic will be presented in class, but for thorough understanding you are expected to (i) *read* your textbook and your class notes; (ii) work on the *homework* problems; (iii) *ask questions* when there is something you don't understand.
4. The link [classroom behavior expectations](#) includes a list of behaviors considered disruptive (math department policy). Please familiarize yourself with it, as this policy will be enforced.
5. Students with disabilities: if you need special arrangements to take this class (including exams), please contact the Office of Disability Services (2227 Dunford Hall, 974-6087 V/T, <http://ods.utk.edu/>)

HOMEWORK, EXAMS and GRADING.

HOMEWORK- Problem sets for each topic presented in class will be given on the course web page. Each week, choose up to **five** problems to turn in solutions for (among the problems listed for the previous week's lectures), subject only to the rule that a problem already solved in class *may not* be turned in for grading.

Homework must be turned in at the **beginning** of class on Thursdays, and late homework will not be accepted. *Pages must be stapled together by the student prior to turning in a homework set- unstapled pages will not be accepted!*

Homework problems will be graded on an *'all or nothing'* basis and will not be graded if not written in a clear, detailed, organized way. 40 correct problems (over the semester) will correspond to a 100% HW grade (and proportionally for fewer problems.) There will be no 'extra credit' assignments.

EXAMS- There will be **three** in-class written exams, with dates announced one week in advance. Only the two highest grades will count towards the exam average. *There will be no make-up exams, even in cases of a justifiable absence*; if you miss an exam, your exam grade will be the average of the other two. Missing two exams (for whatever reason) will result in a grade F. There will also be a comprehensive final.

GRADE COMPUTATION- HW: 30%, Exams: 40%, Final: 30%

Expected scale: below 50: F; 50-59: D to C-; 60-69: C or B-
70-79: B; 80-100: B+ to A. *I do not 'grade on a curve'.*

Remark. Regardless of the course average as computed above, each of the following will result in an F grade: (i) missing two exams, or missing the final; (ii) exam+homework average less than 40%, or less than 40% on the final. (iii) missing 3 consecutive lectures.

IMPORTANT DATES: Add/drop without W: Jan 16; drop w/ W: March 10; spring break: March 16-20; drop w/ WP/WF: March 31; last day of class: Th, April 23; Final Exam: April 30, 10:15-12:15 (Section 3); May 5, 2:45-4:45 (Section 5).