

## MATHEMATICS 231- DIFFERENTIAL EQUATIONS-FALL 2008

**Time and place:** Tu+Th, 2:10-3:25, Ayres 219

**Instructor:** Dr. A. Freire, office: Ayres 207A, 974-4313

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**Office hours:** after class- Tu+Th: 3:30-5:00, or by appointment (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:** I won't follow any single textbook closely, but students are expected to have a differential equations text at an appropriate level. A good choice with many good problems and complete coverage is *Tenenbaum-Pollard*; I will more-or-less follow it, and will use it as a source of problems and examples for the course. (This book has been ordered by the UTK bookstore, approx. cost \$18).

### COURSE POLICIES

1. *Attendance:* students are expected to come to every class. Each lecture will include new material, sometimes not easily found in the typical texts. (**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 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 **four** 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.)

**EXAMS-** There will be **two or three** in-class written exams, with dates announced one week in advance. Students who have to miss an exam due to a university activity or for a *documented* medical reason must inform me no later than the class preceding the exam. *'No shows'* to an exam without prior announcement will result in a grade zero for the exam, which cannot be replaced. There will also be a comprehensive final exam. (If there are three in-class exams, only the two highest grades will count towards the exam average.)

**MAKE-UP EXAMS-** **At my discretion**, a student **may** be given the opportunity to take a written make-up exam, to replace *one* low exam grade or a justified absence to *one* exam. Conditions to be met include: good attendance and good homework record to date. The exam will be scheduled outside of normal course hours. *Remark:* if there are three in-class exams, there will be no make-ups of exams. *There will be no individual 'extra credit' assignments.*

**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 tests, 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: Aug 29; drop with W: Oct 21; drop with WP/WF: Nov 11; Final Exam: Dec 11