Math 340, Section 3, MTWF 13:10, Room E202

Lecturer: Alexander Hulpke, Weber 217

Office Hours: TWF: 9:00-10:00, M: 15:10-16, TW: 14:10-15:00

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Lab Section: This course is formally split in a lecture and a lab session which in practice will not be separated. You should register, however for both lecture (301203) and Lab (308782).

Textbook: William Boyce, Richard DiPrima: Elementary Differential Equations, 7th ed., Wiley 2003

We will not use the software on the books CD or the publishers course web pages – if you get a used edition without these cheaper, you can use it as well.

We will be covering roughly chapters 1,2,3,6,7,9 The pace will be roughly one section per lecture.

Exams

There will be two midterms: September 26 and October 31, at the usually class time, as well as a final on December 16, at 13:30.
Let me know soon if there are collisions with exams in other courses.

Grades

will be based on homework (40%), midterms (20% each) and final (20%). (This implies in particular, that it will be extremely hard to get a good grade if homework is not submitted regularly!). Grades will be given on a linear scale with about 50% corresponding to D and 90% to A.

I expect to see you regularly in class and to regularly hand in solutions to the homework problems. (If attendance drops down substantially I reserve the right to have unannounced quizzes in class which would count as part of the homework.)

For privacy reasons the university does not permit open posting of grade information. Because of this, grades for the final and overall grades will be posted in WebCT. (Log into WebCT and select the M340 course.) Please note that WebCT will not be used for any other purpose. In particular we will not use the WebCT specific mail and discussion tools.

Homework

Homework will be handed out every monday in the lecture. It consists of practice problems from the book (whose solutios need not be handed in) and new problems. Solutions to these new problems are due at the start of the lecture of the tuesday of the following week. No late homework will be accepted (except for force majeure or permission by me in advance).

Homework has to be submitted individually. You can (and should) discuss the problems with fellow students, but you should write up the solution yourself. (Copying will only hurt you in the end once exam time comes.)

Because of time restrictions, some of the problems might not be covered in class, but I'm happy to go through any problems during office hours.

Computer use

The availability of computer packages such as Maple, Mathematica, Matlab and so on provides an opportunity to easily conduct numerical experiments and to tackle realistic and more complicated problems. We will use one of these, Maple, with two goals in mind: (a) demonstrate concepts seen in class, (b) allow you to become familiar with computer software to solve differential equations. In addition to the packages mentioned above, many illustrative examples can be found at Addison-Wesley's Interactive Differential Equations website `http://www.aw-bc.com/ide/`. You are encouraged to explore these examples as you proceed in the course.

Some of the Tuesday class sessions will take place in the computer lab in Weber 205. The dates in question will be announced in advance in the lecture. The first such lab session is on the 26th.

You have access to Maple on the computers in this lab at other times as well, as long as it is not in use by another class. During the first lecture, you will be given a username and a password for the computers in the lab. Do not share this information with others. This account is to be used only for this course but not for other purposes. The class account will be deleted at the end of the semester.

To log in at the lab, make sure that the **Domain** is set to `MATHSTAT`. **Login** and **Password** will be given in class.

Please make sure that you log out (`ALT-F4` or `CTRL-ALT-DEL`) before you leave the terminal. Do not lock the screen if you have to leave for more than a few minutes.

Tutoring

Courtesy of the College of Natural Sciences, free tutoring for M340 is available at Ingersoll Hall. More information is available at: `http://www.colostate.edu/Depts/NatSci/html/Tutorial.html`

I wish you success with this course and all the best for the coming semester.