First day handout, Math 152H 501& 502, Fall 2006

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Math 152 Course Home Page URL address is

`http://calclab.math.tamu.edu/docs/math152/`

There will be a specific Math 152H page on my own web site (URL above).

Course Description.

Credit 4. The course will cover techniques of integration and applications of integration, such as area, volume, arc length, work, hydrostatic force, center of mass and first order differential equations. The course then covers sequences, series and power series. Finally the course covers 3D vectors, dot and cross products and lines and planes. The course meets for three hours per week in lecture [we may take time out to thrash out some problems, as well] and twice per week in recitation with your teaching assistant (TA). One of your recitation meetings is designed to discuss questions over homework or lecture. The other recitation meets in the computer laboratory using the computer algebra package *Maple*. The goal of the computer laboratory portion of the course is to show how problems that are too difficult (or just too tedious) to be solved by hand can be solved with the help of the computer. The prerequisite for this course is Math 151 or equivalent.

Texts. Calculus: Early Vectors, preliminary edition, by Stewart et al, published by Brooks/Cole. The computer laboratory will also use Calclabs with Maple , also published by Brooks/Cole.

Grading. Your grade will be determined by three exams, a cumulative final exam, and a laboratory grade. The weights of each of these are as follows.

Exam I	Exam II	Exam III	Final	Lab
15%	15%	20%	25%	25%
Sep. 28	Oct. 26	Nov. 28	December 11 3:30-5:30	

Exams I, II and III are *not* common exams. We will use the same time and room that they use, on the evenings from 7:30-9:30 p. m. on the dates given above, but not the same questions. Copies of old *common* exams, for what they're worth, are available on the web. The increased weights of the third and final exams reflect the cumulative nature of the course. The laboratory grade will be determined by short quizzes (40%) and Maple assignments (60%).

There is a second page, with further details and discussion of 'Maple projects', the honor code, make up policy, etc.

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Maple projects

Maple projects are assignments you do in groups of four or so, using Maple as a tool. They involve questions that capture a side of what calculus is used for that you wouldn't otherwise see. There are a number of such projects at the back of the paperback manual that goes with the hardcover *Stewart* textbook. You will be doing three such projects. As this is an honors course, we will be digging a little deeper on at least one of these projects. For instance, we ought to be able to do a little better at, say, finding the center of Texas, than this fairly basic project—what happens if we use an online map of the state and get some good numbers? Does it matter that Texas is not flat, but part of a sphere?

Academic Integrity

Another academic, at another University, was musing about the great times to be had at his school.

> It was too good to be true; there had to be a catch. What's my part of the bargain? he had asked himself.
> 'And I figured it out,' he said, looking at me with that benign, gentle half-smile of his. You have to tell the truth.'

Your end of this bargain is the Aggie honor code. I expect you to live up to it. Your fellow students expect the same. And you owe it to yourself.

Absences

Make-ups for exams and quizzes will be given in accordance with University Regulations. Illness, injury, religious obligations, and the like are covered. Some situations can occur that don't precisely fit these regulations and I try to be reasonable.

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