Mathematics 2142

Advanced Calculus II

Spring, 2009

(In case you were planning to become a lumberjack, The Wall Street Journal might have some information you might find interesting.

Instructor: Bill Abikoff

Text: Fitzpatrick, Advanced Calculus, Second Edition

Meeting times: 12 to 12:50 Monday and 12:30 to 1:45 on Tuesday and Thursday. All classes are in MSB 118.

The course is the second in a theory-oriented sequence giving an introduction to calculus (from an advanced point of view), differential equations and linear algebra. The sequence provides a sound foundation for further study in mathematics, statistics and theoretical science and engineering. The course will have projects which complement the class material.

The course is directed at students who have demonstrated an aptitude for mathematics and are willing to work hard to further both their skills and a deeper understanding of rigorous, conceptual thinking.
Permission of the instructor is required for anyone who has not taken Math 2141.

The sequence provides an organized introduction to the ideas of the subjects and reasoning with their ideas and concepts. You'll work hard but I'm there to back you up.

It might be useful to make available some further information about the course. Additional description is available in the Honors Program listing for the course (click here); a more informal description is given when you click here.

You might also find it interesting to compare this course with the MIT undergraduate courses on calculus from a theoretical viewpoint. Look at the OpenCourseWare project at MIT:
http://ocw.mit.edu/OcwWeb/Mathematics/index.htm
Their course numbers are 18.014 and 18.02. They chose to use a forty year old, but classic, text. The one we use is very recent; however, courses at this level rarely follow the text too closely.

I often follow the questions asked by the class rather than my own notes --- so you should try to take good notes and I encourage you to share them.

My e-mail address is abikoff@math.uconn.edu . Clicking on the address should give you a pop-up mailer window. My homepage is http://www.math.uconn.edu/~abikoff.
I will always be available, as often and as soon as needed, by appointment. e-mail is the most reliable means of contacting me.

Lists of homework assignments, projects and other information for students are given as given as hypertext links below. The lists are works in progress.

Homework

Projects are available here.

New and important is a place where I'll put items as needed.