Course Information
Math 3592H: Honors Second Year Calculus; Fall 2014
10:10 A.M. - 11:00 A.M. ; M,W,F ; VinH 209

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Office Vincent 222 Office Hours TBD

Course Description: This is the honors sequence for the second year Calculus syllabus here at the University of Minnesota. Our topics in the Fall term will include basics of the real numbers; the implicit and inverse function theorems; the mean value theorem; the procedure of Gaussian elimination for matrices; the fundamental theorem of linear algebra (relating dimensions of the kernel and image of a linear map); Newton’s method; higher partial derivatives; Lagrange multipliers; introduction to integration.

Text: Vector Calculus, Linear Algebra and Differential Forms: A Unified Approach (4th Edition), by J. Hubbard and B. Hubbard. We will follow the topics in this text relatively closely, though our treatment of some topics will come from other sources.

There are other texts which will help for much of the material that we cover and some of these texts will be put on reserve in the math library (third floor of Vincent Hall - entrance off the south stairwell.). Students are strongly encouraged to consult these texts for alternative treatments of the material we cover.

Homework: There will be a homework assigned approximately every week - we will aim to assign them each Friday, and they will be due the next Friday at the start of class. Late homework will not be accepted.

You are encouraged to work together on the homework, but all solutions must be written in your own words - and you are expected to understand any argument you present in your solutions.

We will drop your lowest homework score before computing your grades. (For example, if you miss one homework you will receive a "0" that week, but it will not affect your final grade as one score gets dropped.)

Exams and Grading: There will be two midterm exams and a final exam, all of which will be closed book, closed notes, and administered in our classroom (Vincent 209). The midterms will be Monday, October 20th and Wednesday, November 19th. The final exam is 8-10am on Wednesday, December 17th.

Course grades will, to first approximation, be computed as follows: the midterms will in total contribute 35% of the final grade, the final exam contributes 35% of the final grade, and the homework contributes 30% of the final grade.

Classroom Expectations: We promote a classroom environment that encourages participation and concentration from everyone - students and instructor! It almost surely goes without saying, but we’ll say here anyways that while we certainly respect students who during class time wish to read newspapers (online or paper copies), novels, or material (paper or online) related to topics other than those we are covering in this course, at the same time such activities likely distract students from our class discussion. Students who produce such distractions will be asked to kindly stop, or to leave the classroom for that period.