MATH 202: CALCULUS III

Instructor:
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Office Hours: Friday 1.30 – 3.30, and by appointment
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Course website: math.jhu.edu/~jlind/202/

Calculus III develops the tools of differential calculus for functions defined on spaces of multiple dimension. It is assumed that you know about computing derivatives and integrals for functions $f(x)$ of a single variable x. This semester, we will learn how to extend these methods to multivariable functions $f(x_1, \ldots, x_n)$. More importantly, we will learn what these techniques reveal about the objects of two and three-dimensional geometry, including applications to "real-world" phenomena.

Lecture. MWF 11-11.50 or 12-12.50 (depending on your tutorial section) in Remsen 101

Tutorial Sections. In addition to my lectures, you will attend weekly tutorial sections. In tutorials, your TA will help your work exercises and homework problems. Your TA is also an excellent resource for asking one-on-one math questions. You must attend the tutorial section that you are registered for.

Text. Vector Calculus, 6th edition by Marsden and Tromba. [ISBN-10: 1429215089]

Homework Assignments. There will be weekly homework assignments, usually due on Fridays. You are encouraged to work on homework problems together, but you must write up your own work individually. This does *not* mean copying someone else's answers down in your own handwriting. Your solution should clearly show every step along the way to arriving at your answer, using *complete sentences in English* to explain your reasoning. This does not mean a catalog of your scratch work, but rather a complete explanation of why the answer is true. Late homework will not be accepted.

Exams. Over the course of this semester there will be two midterm exams. The dates of the midterms are posted on the course website. There will be a final exam on Wednesday May 7th from 9am to 12noon. You must take the final exam at this time. You may not use calculators during exams (they would do more harm than good anyways).

Grading. Your grade for the course will be determined by the following weighting scheme:

15% – Homework
20% – Midterm I
20% – Midterm II
45% – Final Exam

Ethical Academic Conduct. I expect you to comport yourself with honor, as derived from respect for the academic program, your peers and your instructors. The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. See the guide on "Academic Ethics for Undergraduates" and the Ethics Board website (ethics.jhu.edu) for more information.

As mentioned above, in this course you may collaborate on homework assignments, but you must write up your own homework independently. If you cheat on an exam, you will receive a 0 for that exam.