Syllabus: Math 283 Calculus 3, Summer 17

Dr. Kurt Ehlers (Kurt)
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Office hours: 12:00-1:00 every day. I have to leave by 2:45 M-Th for a class at another campus!

Text: *Multivariable Calculus*, 8E James Stewart, the combined book works as well. If you are using the e-book you may need the Webassign class key for this class: unr 2872 8509. (There is no online homework.)

**Course description:** 1) Vectors and the geometry of $\mathbb{R}^3$, 2) The calculus of vector valued functions, arc length, and geometry of curves, 3) Differential calculus of functions of several variables and optimization problems, 4) Multiple integration and change of variables, 5) Vector calculus: path and flux integrals, conservative vector fields, the theorems of Green, Gauss and Stokes.

**Communication:** Contact me by e-mail. The class moves fast so let me know about problems as soon as possible.

**Homework** The weekly homework assignments will consist of problems from the end of each section in the book. For short summer classes I assign odd problems whose solutions are in the appendix, or even problems with answers provided. I will also assign some of my own problems with solutions provided. I will collect the homework when I pass out the exams. The homework will be graded primarily based on organization and apparent completeness. You can find outlines of many of my lectures on my website in the classes section.

**Exams** We will have a weekly mini-exam covering the previous weeks assignment. The plan is to do them during the last 50-60 minutes on the scheduled days. Note that while the last exam is not explicitly comprehensive, it will, by nature involve most of the course topics; it will cover a few more day’s material and will be slightly longer. The first 5 exams are scheduled for the first meeting day of the week and the last is on the last day of the class.

- Exam I - May 30
- Exam II - June 5
- Exam III - June 12
- Exam IV - June 19
- Exam V - June 26
- Midterm VI - July 7

**Grading:** Your final grade will be based on the following: 10% Homework, 90% equally weighted weekly exams.

I will follow the traditional 90, 80, 70 cutoffs for A’s, B’s, C’s, D’s and F’s.

Note: The Mathematics Department is committed to equal opportunity in education for all students, including those with documented physical disabilities or documented learning disabilities. University policy states that it is the responsibility of students with documented disabilities to contact instructors during the first week of each semester to discuss appropriate accommodations to ensure equity in grading, classroom experiences and outside assignments.