## Math 222 – Calculus and Analytic Geometry, II Lecture 4, Fall 2009

## Instructor:

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Math 222 Website: http://www.math.wisc.edu/~seeger/222.html It will be used for announcements and handouts.

**Topics:** Methods of integration, Taylor's theorem, sequences and series, complex numbers, a first look at differential equations, some analytic geometry.

**Text:** We shall use a slightly revised version of Professor Angenent's previous Math 222 notes. The course packet is available at Bob's Copy Shop on 1401 University Avenue, near Randall.

I will keep a list of errata on the website. If you find something email or tell me. I will give extra credit to students who make meaningful contributions to this list.

Lectures: MWF, 12:05-12:55, B130 Van Vleck.

**Discussions:** The discussions are taught by Teaching Assistants. The current schedule is as follows (some room assignments might still change).

Zajj Daugherty, 101-18 VV, e-mail: daughert(at)math.wisc.edu DIS 362, TR 8:50-9:40, B317 VV DIS 369, TR 2:25-3:15 p.m., B317 VV

Jingwei Guo, 101-03 VV, e-mail: guo(at)math.wisc.edu DIS 366, TR 12:05-12:55, B329 VV DIS 367, TR 1:20-2:25 p.m., B305 VV

Leland Jefferis, 101-15 VV, e-mail: jefferis(at)math.wisc.edu DIS 365, TR 12:05-12:55, B317 VV DIS 370, TR 2:25-3:15 p.m., B329 VV

Beth Skubak, 518 VV, e-mail: skubak(at)math.wisc.edu DIS 361, TR 7;45-8:35, B211 VV DIS 364, TR 11:00-11:50, B329 VV

**Office hours:** A.S: I will usually be available after class on Monday and Friday. Additional office hours are by appointment (often a good time to see me may be Tuesday, 3:00-3:50 p.m.). If there is interest, I can offer a help session on Sunday afternoon.

TA office hours will be posted later.

**Studying:** In order to pass this class you will have to *regularly* study and review the material. Work through the exercises in the notes. It is often suggested as a rule of thumb that you should expect to spend at least 8-10 hours per week working on Math 222 in addition to attending lectures and discussions.

**Exercises and homework:** There are lots of exercises in the notes. Our expectation is that you will do all of them. You should expect that the exams are quite close to some of the problems listed in the notes but this is only one of the reasons that it is in your best interest to work through these exercises.

There will be weekly homework assignments, and the TAs will grade a small subset of these problems. The assignments will be announced by email and posted on the class website. Your TAs will talk to you in more detail about their expectations and policies.

On the writing up of homework, you may want to consult Zajj Daugherty's writing tips at:

http://www.math.wisc.edu/~daughert/teaching/

Midterm examinations: There will be three in class midterms.

Midterm I: Friday, September 25.

Midterm II: Monday, October 19.

Midterm III: Monday, November 23.

**Final Examination:** There will be a two-hour final examination given on *Satur-day, December 19, at 12:25 p.m.* The date and time of this exam was set by the university. We cannot reschedule or give make-ups for the final exam to accomodate an early departure. Please inform *both me and your TA* early if you have a legitimate conflict with the final exam.

Missed exam policy: We will not schedule any regular make-up exams. Students with a *legitimate* conflict should arrange with their TA's to schedule a make-up exam. In case of medical problem we will ask you to bring a note from a physician. You must inform your TA of any anticipated conflict *at least* a week ahead of time. **Grading:** The course grades will be computed as follows. Each midterm will be graded on a scale from 0 to 100, and the final will be graded on a scale from 0 to 100, and the final will be graded on a scale from 0 to 100, based on your homework grades. At the end of the semester, all these scores are added to give your total score, in the range from 0 to 600. The grades are given according to the total scores.

**Calculators.** Calculators and computers are useful and powerful tools that can be a great help with numerical computations, algebraic manipulations, curve sketching, and visualization. However, it is crucial that you learn how to do simple versions of these activities on your own, without the use of calculators. *Thus you will not* be permitted to use calculators on exams in this course. All problems on the exams are designed so that they can (and should) be done without calculators. You may use calculators to check answers for your questions, but you must learn to have confidence in your own calculations.

**Help:** Come to the office hours. Additional help is available in the Math Lab B227 Van Vleck Hall. This room is primarily staffed by teaching assistants. Help is available in the afternoon, Monday through Thursday and on Sundays. For the schedule check http://www.math.wisc.edu/~mathlab/

For other links to Math help resources (in particular the Math tutorial program) see http://www.math.wisc.edu/~tprogram/

A. Seeger, August 2009