Mathematics 1220, Calculus II Sections 3 (9:40 AM) and 2 (10:45 AM), Spring 2013

Instructor: Professor Kenneth M. Golden Office: LCB 328 Phone: 801-581-6176 (office), 801-596-9328 (home) Email: kenatmath@gmail.com, golden@math.utah.edu URL: www.math.utah.edu/~golden Office Hours: Mondays 11:45 pm - 1:00 pm, and by appointment.

Text: Calculus with Differential Equations, 9th Edition, Varberg, Purcell and Rigdon

Course Materials: Practice exams, the syllabus, schedules, etc. can be obtained at www.math.utah.edu/ \sim golden by clicking on the "Teaching" tab on the left.

Course Description: Mathematics 1220 is a continuation of the study of differential and integral calculus begun in 1210, focusing on applications. Topics include transcendental functions, techniques of integration, improper integrals, infinite sequences and series, Taylor series, and differential equations.

Teaching Assistants (TA's):

Myla Kilchrist, kilchris@math.utah.edu, 581-7653, LCB Loft Ben Murphy, murphy@math.utah.edu, 801-581-5394, JWB 326 (Section 3) Christian Sampson, css@math.utah.edu, 801-581-5394, JWB 326 (Section 2)

Discussion Sessions: Every week there will be some (optional) discussion sessions conducted by the TA's. During these sessions you can get help with webwork assignments, exams, etc. You can go to any session. Schedule of times and rooms to be posted later.

Getting Help:

- Setting up a webwork account: In class you'll be given information on how to get into your own Webwork account. If you encounter problems, please contact a TA, and give your full name, course number and section, and your student ID number.
- Webwork feedback button: When you use the feedback button within an exercise, state your question clearly. All relevant data about your question and answers is sent to the TA. Please don't over-use this option, the TA's will be getting lots of emails.
- Free tutoring: Available all day M-F in the Undergraduate Math Center.

Grades and Exams:

- (50%) Your two best scores on three mid-term exams (your lowest score is dropped). There are NO make-up exams. You may bring one sheet of paper and a calculator, but NO laptops or wireless devices. Please bring University ID to all exams.
- (25%) FINAL EXAM.
- (25%) WeBWorK assignments.

Course Outline:

January	7-11	6.1 - 6.2	Logarithms and inverse functions	
	14-18	6.3 - 6.5	Exponential functions and growth	
	22 - 25	6.6 - 6.9	1^{st} order DE's and special functions	
	28-1	7.1 - 7.3	Techniques of integration	
February	4-8	7.4 - 7.5	More techniques of integration	EXAM I (February 8)
	11 - 15	8.1-8.4	L'Hôpital's rule, improper integrals	
	19-22	9.1 - 9.2	Infinite sequences and series	
	25 - 1	9.3 - 9.4	Positive series	
March	4-8	9.5	Convergence tests	EXAM II (March 6)
	9-17		SPRING BREAK	
	18-22	9.6 - 9.7	Power series	
	25 - 29	9.8 - 9.9	Taylor series	
April	1-5		Fourier series	
	8-12	10.5 - 10.7	Polar coordinates	EXAM III (April 12)
	15 - 19	15.1 - 15.2	Differential equations	
	22 - 24	15.3	Applications	
April	26		10:30 AM - 12:30 PM, JWB 335	FINAL EXAM $(1220-2)$
May	1		8:00 AM - 10:00 PM, JWB 335	FINAL EXAM $(1220-3)$