

Mathematics 1220-2 Calculus II Fall 2006

Instructor: Sarah N. Kitchen
Email: snkitchen@gmail.com
Homepage: <http://www.math.utah.edu/~kitchen>

Office: JWB 307
Office Phone: 581-8338

Office Hour: Thursdays, 9-10 am open office hour, 8:30-9 am and 10-10:30 am reserved for appointments.

I am also available in the Tutoring Center on Fridays from 9:30-10:30 am.

Text: *Calculus*, 8th Ed., D. Varberg, E.J. Purcell, and S. E. Rigdon

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, numerical methods and approximations, and differential equations.

Prerequisites: Calculus I

Grades and Exams:

- (50%) Midterms: There will be 3 midterms over the course of the semester. The lowest midterm grade will be dropped in the final grade calculations. For each midterm, you will be allowed one 8.5×11 -inch sheet of notes. *There will be exams/exam portions where calculators are not allowed.*
- (25%) Homework: Homework will be assigned weekly on Wednesdays and due the following Friday. Problems will be assigned directly from the book and a random subset of those assigned will be graded.
- (25%) Final Exam: The final exam is scheduled for Friday, December 15 from 8-10 am. Roughly $3/4$ of the material will be cumulative and the last $1/4$ will be new material covered after exam III.

Makeup Policy: Alternate exam dates can be arranged for participants in University sponsored activities which prevent the student from being in class, or students with disabilities falling under the ADA. Such students should contact me early in the semester about their position and note that *all exams must be completed by the scheduled exam date*. Make-up exams in general will not be given, except in extreme circumstances, and requests for such must be made no later than 2 weeks before the scheduled exam. In the case of an unexpected necessary absence, please contact me as soon as you return and I will handle such situations on a case-by-case basis.

Course Outline:

August	23-29	7.1-7.4	Logarithms and exponentials
	30-5	7.5-7.6	Growth, 1st order DE's
September	6-12	7.7-7.8	Inverse trig and hyperbolic functions
	13-19	8.1-8.3	Substitution, trig, trig substitution
	20-26	8.4-8.5	Integration by parts, rational functions
	27		Exam I Review
	29		EXAM I
October	2-3	9.1-9.2	Indeterminant forms
	4-10	9.3-9.4	Improper integrals
	11-17	10.1-10.2	Infinite sequences and series
	18-24	10.3-10.5	Convergence tests
	25-31	10.6-10.7	Power series
November	1		Exam II Review
	3		EXAM II
	6-7	10.8	Taylor and Maclaurin series
	8-14	11.1-11.2	Taylor approximation, numerical integration
	15-21	11.3-11.5	Numerical equation solving
	22-28	12.1-12.8	Conic sections, polar coordinates
	29		Exam III Review
December	1		EXAM III
	4-6	18.1-18.3	Differential Equations
	7		University last day of classes
	15		FINAL EXAM

Nondiscrimination and Disability Access Statement: The University of Utah is fully committed to policies of nondiscrimination and equal opportunity, and vigorously pursues affirmative action in all programs, activities, and employment with regard to race, color, national origin, sex, age, and status as a person with a disability. Religion, sexual orientation, and status as a disabled veteran or veteran of the Vietnam era also are protected under nondiscrimination and equal opportunity employment policies. The University seeks to provide equal access to its programs, services and activities for people with disabilities. Reasonable prior notice is needed to arrange accommodations. Students should call 801-581-5020 or 801-585-1813 (both are TDD). Evidence of practices not consistent with these policies should be reported to the Employee Relations/Dispute Resolution Office, 801-581-8365 (voice or TDD). If you require special accommodations under the ADA please inform me through official channels early in the semester.