

Instructor. Professor David C. Dobson, LCB 210, 585-7660, dobson@math

Office Hours. MWF 1:00 pm – 2:00 pm, by appointment, or drop by anytime.

Text: *Calculus*, by E. H. Johnston and J. C. Mathews.

Homepage: <http://www.math.utah.edu/~dobson/1260/>

Course Description. Introduction to Vectors in the plane and in 3-space, differential calculus in several variables, integration and its applications in several variables, vector fields, and line, surface, and volume integrals. Green's and Stokes' Theorems. The following schedule of topics is **subject to change**, however the exam dates are fixed.

January	12-16	7.5-8.1	Infinite Series	
	20-23	8.2-8.4	Vectors, matrices	
	26-30	8.5-9.1	Linear functions, motion	
February	2-6	9.2-9.5	Several variables	
	9-13	9.6-10.2	Cylindrical coords, differentiability	
	17-20	10.3-10.5	Chain rule	
	23-27	10.6-10.7	Optimization	EXAM I (Feb. 27)
March	1-5		Applications- Fourier series, convolutions	
	8-12		Applications- Differential equations	
	15-19		SPRING BREAK	
	22-26	11.1-11.3	Multiple integrals	
April	29-2	11.4-11.6	Change of variables	EXAM II (Apr. 2)
	5-9	12.1-12.3	Line integrals	
	12-16	12.4-12.6	Green's Theorem, surface integrals	
	19-23	12.7-12.8	Divergence and Stokes' Theorems	
	26-28		Review	
May	5		FINAL EXAM (1:00 – 3:00 pm)	

Grading Policy. Grades are based on the following: midterm exams I and II (25% each), final exam (25%), and homework assignments (25%). You may bring one sheet of paper, and a graphing calculator to any exam. Computers, PDAs, and wireless devices are not allowed in exams.

Computers. You are encouraged to use computers to help learn and enhance the material, as well as to solve and check homework problems. Keep in mind however that your goal is to *understand* the material and that you will not have the computer with you during exams.

Weekly Homework. *No late homework will be accepted.* Only a subset of the problems in each homework set will be graded. It is important that each student completes every homework set. Time and effort spent on homework is invariably reflected in exam scores.