

King Fahd University of Petroleum and Minerals
Department of Mathematical Sciences

Syllabus of Math 131 (041)

Course Coordinator: Dr. A. Umar

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<http://faculty.kfupm.edu.sa/math/almomani/>

Course # : Math 131

Title : Finite Mathematics

Textbook: *Introductory Mathematical Analysis for Business, Economics, and the life and Social Sciences*, by Ernest F. Haeussler, Jr. & Richard S. Paul, 10th ed. (2002). (Supplementary notes from *Mathematics with Applications*, by Lial & Hungerford.)

Week	Date	Section	Material	H/Work
1	Sept. 11 -15	2.1	Applications of Equations	12,16,28,33
		2.3	Applications of Inequalities	4,6,9,10
		4.1	Lines (Review)	10,16,56,72
		4.2	Applications and Linear Functions	18,20,24
2	Sept. 18-22	4.3	Quadratic Functions (Review)	26,27,30
		4.4	Systems of Linear Equations	16,24,28,34
		4.5	Nonlinear Systems	6,10,12
3	Sept. 18-30*	4.6	Applications of Systems of Eqns.	6,15,18,22
		7.1	Linear Inequalities in Two Var.	2,4,20,28
		7.2	Linear Programming	4,6,16,18
4	Oct. 02-06	7.3	Multiple Optimum Solutions	2,4
		6.4-6.5	Reduction in Matrix Algebra	6.5:8,10,20,21,24
		7.4	The Simplex Method	
5	Oct. 09-13	7.4	The Simplex Method (cont'd.)	4,8,16,18,19
		7.8^	The dual	4,10,12
6	Oct. 16-20	8.1	Compound Interest	2,10,12,22
		11.3	Interest Compounded Continuously	2,6,10,12
		8.2	Present Value	2,6,8,11
7	Oct. 23-27	8.3	Annuities	16,18,22,24,26
8	Oct. 30- Nov.03	9.1	Basic Counting Principle and Perm	5,14,21,36
		9.2	Comb and Other Counting Prin.	2,5,11,33
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9	Nov. 20-24	9.3	Sample Spaces and Events	2,6,8,22,29
		9.4	Probability	4,10,18,24
10	Nov. 27- Dec. 01	9.4	Probability (cont'd)	
		9.5	Cond. Prob. and Stoc./ Proc. .	2,9,12,38
11	Dec. 04-08	9.6	Independent Event	2,7,15,25
		Supplem-Notes	Frequency Distributions	
12	Dec. 11-15	Supplem-Notes	Measures of Central tendency, Measures of Variations.	11.1-1,20,35, 39,45; 11.2-2,7,24,26
13	Dec. 18-22	10.1	Discrete Rand Var. and Exp Value	6,9,14,18
		10.2	The Binomial Distribution.	4,10,15,20
14	Dec. 25-29	10.2	The Binomial Distribution (cont'd.)	
		18.2	The Normal Distribution	2,8,9,20,22
15	Jan. 01-03 (2005)	18.2	The Normal Distribution (cont'd.) Review and catch-up	

*Suggested times for Exams #1 & #2: Wednesday, Oct. 13th and Wednesday, Dec. 08th, respectively

*KFUPM policy with respect to attendance will be enforced.

*Final exam: To be announced later (Comprehensive).

*DN policy will be adopted according to KFUPM regulations (from 9 absences)

^ Exclude Example 3 from Section 7.8