King Fahd University of Petroleum and Minerals **Department of Mathematical Sciences** Syllabus of Math 131 (032) Course Coordinator: Dr. A. Umar (Course Instructor: Marwan Al-Momani

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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	Feb.14 -18	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	Feb.21-25	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	Feb. 28-	4.6	Applications of Systems of Eqns.	6,15,18,22
	Mar. 03	7.1	Linear Inequalities in Two Var.	2,4,20,28
		7.2	Linear Programming	4,6,16,18
4	Mar. 06-10	7.3	Multiple Optimum Solutions	2,4
		6.4-6.5	Reduction in Matrix Algebra	6.5:8,10,21,20,24
		7.4	The Simplex Method	
5	Mar. 13-17	7.4	The Simplex Method (cont'd.)	4,8,16,18,19
		7.8	The dual	4,6,12,13
6	Mar. 20-24	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	Mar. 27-31	8.3	Annuities	16,18,22,24,26
8	Apr. 03-07	9.1	Basic Counting Principle and Perm	5,14,21,36
		9.2	Comb and Other Counting Prin.	2,5,11,33
9	Apr. 10-14	9.3	Sample Spaces and Events	2,6,8,22,29
		9.4	Probability	4,10,18,24
10	Apr. 17-21	9.4	Probability (cont'd)	
		9.5	Cond. Prob. and Stoc./ Proc	2,9,12,38
11	Apr. 24-28	9.6	Independent Event	2,7,15,25
		Supplem-	Frequency Distributions	
		Notes		
12	May 01-05	Supplem-	Measures of Central tendency,	11.1-1,20,35,
	-	Notes	Measures of Variations.	39,45; 11.2-
				2,7,24,26
13	May 08-12	10.1	Discrete Rand Var. and Exp Value	6,9,14,18
	_	10.2	The Binomial Distribution.	4,10,15,20
14	May 15-19	10.2	The Binomial Distribution (cont'd.)	
	5	18.2	The Normal Distribution	2,8,9,20,22
15	May 22-26	18.2	The Normal Distribution (cont'd.)	
			Review and catch-up	

*Suggested times for Exams #1 & #2: Tuesday, Mar. 16th and Wednesday, Apr. 21st, 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)