

King Fahd University of Petroleum and Minerals
Department of Mathematical Sciences
 Syllabus of Math 131 (061)

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, 11th ed. (2004). (Supplementary notes from *Mathematics with Applications*, by Lial & Hungerford.)

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Office Hours: SMW 10:00 – 10:50 and 11:00 – 11:50 and also by appointment

Week	Date	Section	Material	Homework
1	Sept. 9-14	1.1	Applications of Equations	12,16,34,36
		1.3	Applications of Inequalities	4,9,10
		3.1	Lines (Review)	12,14,56,58,72
		3.2	Applications and Linear Functions	16,17,18,20,24
2	Sept. 16-20	3.3	Quadratic Functions (Review)	25,28,30,33
		3.4	Systems of Linear Equations	10,16,25,34
		3.5	Nonlinear Systems	6,10,12
Saturday, Sept. 23: National Holiday				
3	Sept. 24-27	3.6	Applications of Systems of Eqns.	5,15,18,20
		7.1	Linear Inequalities in Two Var.	2,4,10,20
4	Sept. 30 – Oct. 4	7.2	Linear Programming	3,6,16,18
		7.3	Multiple Optimum Solutions	2,4
		6.4-6.5	Reduction in Matrix Algebra	6.5: 8,10,21,24
5	Oct. 7-11	7.4	The Simplex Method	4,8,16,17,19
		7.8 [^]	The dual	4,10,12
Oct 12 – 27: Eid Al-Fitr Vacation				
6	Oct. 28- Nov. 1	5.1	Compound Interest	2,10,12,20
		10.3	Interest Compounded Continuously	2,6,10,12
		5.2	Present Value	2,4,6,11
7	Nov. 4 - 8	5.3	Annuities	16,18,22,24,26
8	Nov. 11-15	8.1	Basic Counting Principle and Perm	5,14,21,36
		8.2	Comb and Other Counting Prin.	2,5,11,33
9	Nov. 18-22	8.3	Sample Spaces and Events	2,8,22,29
		8.4	Probability	4,10,18,24
10	Nov. 25 -29	8.4	Probability (cont.)	
		8.5	Cond. Prob. and Stoc./ Proc.	2,9,12,38
11	Dec. 2 - 6	8.6	Independent Event	2,7,15,25
		Supplem-Notes	Frequency Distributions; Measures of Central tendency	11.1: 1,20,35, 39,45
12	Dec. 9 - 13	Supplem-Notes	Measures of Variations	11.2: 2,7,24,26
13	Jan. 16-20	9.1	Discrete Rand. Var. and Exp. Value	5,9,15,18
		9.2	The Binomial Distribution	4,10,15,20
Dec.21 – Jan.5: Eid Al-Adha Vacation				
14	Jan. 6 -10	9.2	The Binomial Distribution (cont.)	
		16.2	The Normal Distribution	2,8,9,20,22
15	Jan. 13 - 17	16.2	The Normal Distribution (cont.) Review and catch-up	-

*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

- **Suggested time for major exams: First – Oct.09, Second – Nov. 20, Third – Dec.18**