King Fahd University of Petroleum and Minerals Department of Mathematical Sciences

Syllabus of Math 131 (032)

Course Coordinator: Dr. A. Umar

(Course Instructor: ; Office Rm Tel.)

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.)

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.)	
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. $16^{\rm th}$ and Wednesday, Apr. $21^{\rm st}$, 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)