

**King Fahd University of Petroleum and Minerals.  
Department of Mathematics & Statistics**

**Syllabus of Math 131 (Finite Mathematics)  
(Semester: 072: February 16, 2008 – June 21, 2008)**

**Instructor: Dr. Raja Mohammad Latif.**

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**Office Hours: Saturday, Monday, Wednesday: 12:15 P.M. – 01:55 P.M.**

**Sec. # 02: 09:00 – 09:50 A.M., Sec. # 03: 10:00 – 10:50 A.M., Sec. # 04: 11:00 – 11:50 A.M.**

**Section # 02: Location: 6-201, Section # 03: Location: 6-169, Section # 04: Location: 6-105**

**Textbook: *Introductory Mathematical Analysis for Business, Economics, and the life and Social Sciences*, by Ernest F. Haeussler, Jr. Richard S. Paul, & R. J. Wood, 11<sup>th</sup> Ed. (2005).**

**(Supplementary Notes: *Mathematics with Applications*, by Lial & Hungerford, 7<sup>th</sup> Ed., 1999).**

Week	Dates	Section	Material	Homework
1	Feb. 16 – Feb. 20, 07	1.1	Applications of Equations	4,12,16,20,25,28,33,36,43
		1.3	Applications of Inequalities	1,2, 4,5, 6, 7, 9, 10, 12
		3.1	Lines (Review)	12, 32, 58, 64, 66,67, 69,72
2	Feb. 23 – Feb. 27, 07	3.2	Applications and Linear Function	16,17,18,20,24,25,26,31,33
		3.3	Quadratic Functions	19,27,29,30,31,34,36,39,40
		3.4	Systems of Linear Equations	21,26,28,29,34,37,39,40,41
3	March 01– Mar. 05, 08	3.5	Nonlinear Systems	4, 6, 7, 9, 12, 13, 14, 15, 16
		3.6	Applications of Systems of Eqns.	7,8,15,16,17,18,19,20,21,25
4	March 08– Mar. 12, 08	7.1	Linear Inequalities in Two Var.	16,18, 20,21, 22, 24, 28, 29
		7.2	Linear Programming	4, 10, 13, 14, 15, 16, 17, 18
		7.3	Multiple Optimum Solutions	1, 2, 3, 4
5	March 15– Mar. 19, 08	6.4	Reduction in Matrix Algebra	17,23,25,27,28,29,30,31,32
		6.5	Reduction in Matrix Algebra	4, 6, 8, 10, 12, 19, 21, 24
		7.4	The Simplex Method	5, 8, 12, 14, 16, 17, 18, 19
6	March 22– Mar. 26, 08	7.8 <sup>^</sup>	The dual (^ Exclude Example 3)	4, 6, 10, 12, 13, 14, 15, 17
		5.1	Compound Interest	8,10, 12, 18, 19, 23. 24, 26
		5.2	Present Value	4, 8, 10, 11, 14, 16, 21
7	March 29 – April 02, 08	10.3	Interest Compounded Continuous	5, 10, 12, 14, 16, 19, 20
		5.3	Annuities	16, 18, 22, 24, 26, 28, 29
8	April 05 – April 09, 08	8.1	Basic Counting Principle & Perm.	4, 6, 8, 10, 19, 22, 25, 26,
		8.1	Basic Count. Princ.&Permutation	29,30,32,35,36,37,38, 40
		8.2	Comb. and Other Counting Princ.	10, 11, 14, 15, 18, 23, 25,
	April 12 –	April 16	MIDTERM VACATION	Sat – Wed : 6 – 10 Rabi II

9	April 19 –	8.2	Comb. and Other Count. Principl	26, 29, 30, 31, 33, 38
	April 23, 08	8.3	Sample Spaces and Events	3,6,9,14,22,26,27,28,29,31
10	April 26 –	8.4	Probability	4,10,16,19,21,23,24,27,31,32
	April 30, 08	8.5	Conditional Probability	2,9,11,12,14,16,17,23,24,
11	May 03 – May 07, 08	8.5	Conditional Probability (Cntd.)	26,36,37,39,41,40,49,50,51
		8.6	Independent Event	2, 4, 7, 8, 13,14, 20, 23, 25,
		8.6	Independent Event	27,28, 29,31, 32,33,35,36
12	May 10 –	9.1	Dis. Rand. Var. & Exp. Value	3,4,5,6,9,11,12,15,16,18,20
	May 14, 08	9.2	The Binomial Distribution	4, 5, 10, 12, 13, 16, 17,
13	May 17 –	9.2	The Binomial Distribution (Cntd.)	19, 20,21,22, 23,24, 25, 26
	May 21, 08	16.2	The Normal Distribution	2,10,14,16,17,18,19,20,21,22
14	May 24 –	16.3	Normal Approx. to Bin. Dist.	1, 2, 3, 5, 6, 7, 8, 9, 10
	May 28, 08	Sup. 11.1 Pg:506-516	Frequency Distributions; Measures of Central Tendency	2, 4, 9, 11, 13, 15, 20, 22, 23, 25, 27, 35, 37, 39, 43, 44
15	May 31 – June 04, 08	Sup. 11.2 Pg:516-525	Measures of Variation Review & Catch Up	5, 8, 10, 12, 13, 24, 25, 26, 33, 36

**KFUPM policy regarding attendance/DN grade will be strictly enforced for implementation.**

**Tuesday, February 26, 2008 (12 Safar 1429 H) : Last day for dropping course(s) without permanent record., Tuesday, April 01, 2008 (24 Rabi I 1429 H) : Last day for dropping course(s) with grade of "W" through Internet <http://regweb.kfupm.edu.sa>; Tuesday, April 29, 2008 (23 Rabi II 1429 H) : Last day for withdrawal from all courses with grade of “W” through the University Registrar Office.; Saturday, May 03, 2008 (27 Rabi II 1429 H) : Beginning of Early Registration for the Summer Session 2007 – 2008 (073), and First Semester 2008 – 2009 (081); Beginning of Registration for Coop and Summer Training.**

**Tuesday, May 27, 2008 (22 Jumada I 1429 H) : Last day for major exams; Last day for withdrawal from all courses with grade of “WP/WF” thru the University Registrar Office.**

**Major Exam I : 25 % (250 Points) (Ch.: 1.1 ,1.3, Ch.: 3.1 – 3.6, Ch.: 7.1 – 7.3, Ch.: 6.4 – 6.5 ) ; Location: OAB AUDITORIUM. Thursday, March. 27, 2008.(Time: 01:30 P.M. – 03:30 P.M.).**

**Major Exam II: 25 % (250 Points) (Ch.: 7.4, 7.8, Ch.: 5.1 – 5.3, Ch.: 10.3, Ch.: 8.1 – 8.6); Location: OAB AUDITORIUM. Thursday, May 15, 2008. (Time: 01:30 P.M. – 03:30 P.M.).**

**Class Tests & Quizzes:10 % (100 Points); Home Work & Attendance, etc : 5 % (50 Points).**

**Final Exam : 35 % (350 Points) (Comprehensive) Tuesday, June 10, 2008, Time: 07:30 A.M.**

**Final Exam Location will be reserved and announced later on by the Registrar Office.**