

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Syllabus of Math 131 (Finite Mathematics), Term: 071: Sep. 08, 2007 – Jan. 30, 2008
Instructor: Dr. Raja Mohammad Latif

Textbook: *Introductory Mathematical Analysis for Business, Economics, and the life and Social Sciences*, by Ernest F. Haeussler, Jr. Richard S. Paul, & R. J. Wood, 11th Ed. (2005).
(Supplementary notes: *Mathematics with Applications*, by Lial & Hungerford, 7th Ed. 1999).

| Week | Dates | Section | Material | Homework |
|-----------|----------------------------|---------------------------------|--|---|
| 1 | Sep. 08 – Sep. 12, 07 | 1.1 1.3 3.1 | Applications of Equations Applications of Inequalities Lines (Review) | 4,12,16,20, 28, 33, 36, 43 2, 4, 6, 7, 9, 10, 12 12, 32, 58, 64, 66, 69, 71 |
| 2 | Sep. 15 – Sep. 19, 07 | 3.2 3.3 3.4 | Applications and Linear Function Quadratic Functions Systems of Linear Equations | 16, 17, 18, 20, 24, 26, 31 27, 29, 31, 34, 36, 39, 40 26, 28, 29, 34, 37, 39, 41 |
| 3 | Sep. 22,24– Sep. 26, 07 | 3.5 3.6 | Nonlinear Systems Applications of Systems of Eqns. | 6, 9, 12, 14, 15, 16 8, 15, 17, 18, 19, 20, 25 |
| 4 | Sep. 29 – Oct. 03, 07 | 7.1 7.2 7.3 | Linear Inequalities in Two Var. Linear Programming Multiple Optimum Solutions | 16, 18, 20, 22, 24, 28, 29 10, 13, 14, 15, 16, 17, 18 1, 2, 3, 4 |
| Oct. 04 – | | Oct. 19 | Id al-Fitr Vacation | |
| 5 | Oct. 20 – Oct. 25, 07 | 6.4 6.5 7.4 | Reduction in Matrix Algebra Reduction in Matrix Algebra The Simplex Method | 17,23, 27,28, 29, 30, 31, 32 6, 8, 10, 12, 19, 21, 24 5, 8, 12, 16, 17, 18, 19 |
| 6 | Oct. 27 – Oct. 31, 07 | 7.8^ 5.1 5.2 | The dual (^ Exclude Example 3) Compound Interest Present Value | 4, 10, 12, 13, 14, 15, 17 8,10, 12, 18, 19, 23. 24, 26 4, 8, 10, 11, 14, 16, 21 |
| 7 | Nov. 03 – Nov. 07, 07 | 10.3 5.3 | Interest Compounded Continuous Annuities | 5, 10, 12, 14, 16, 19, 20 16, 18, 22, 24, 26, 28, 29 |
| 8 | Nov. 10 – Nov. 14, 07 | 8.1 8.1 8.2 | Basic Counting Principle & Perm. Basic Count. Princ.&Permutation Comb. and Other Counting Princ. | 6, 8, 10, 22, 25, 26, 29, 32, 35, 36, 38, 40 10, 14, 15, 18, 23, 25, |
| 9 | Nov. 17– Nov. 21, 07 | 8.2 8.3 | Comb. and Other Count. Principl Sample Spaces and Events | 26, 29, 30, 33, 38 3, 6, 9, 14, 22, 26, 28, 29 |
| 10 | Nov. 24 – Nov. 28, 07 | 8.4 8.5 | Probability Conditional Probability | 4,10,16,19,21,23,24,27, 31 2, 9, 12, 14, 16, 17, 23, 24, |
| 11 | Dec. 01 – Dec. 05, 07 | 8.5 8.6 8.6 | Conditional Probability (Cntd.) Independent Event Independent Event | 26, 36, 37, 39, 41, 49, 51 2, 7, 13, 20, 23, 25, 27, 29, 31, 35, 36 |
| 12 | Dec. 08 – Dec. 12, 07 | 9.1 9.2 | Dis. Rand. Var. & Exp. Value The Binomial Distribution | 3, 4,5,9,11,12,15,16,18,20 4, 5, 10, 12, 17, |
| Dec. 13 - | | Dec. 28 | Id al-Adha Vacation | |
| 13 | Dec. 29 – Jan. 02, 08 | 9.2 16.2 | The Binomial Distribution (Cntd.) The Normal Distribution | 19, 20, 23, 25, 26 2, 10, 14, 17, 19, 20, 21 |
| 14 | Jan. 05 – Jan. 09, 08 | 16.3 Sup. 11.1 Pg:506-516 | Normal Approx. to Bin. Dist. Frequency Distributions; Measures of Central Tendency | 1, 3, 5, 6, 7, 8, 9, 10 2, 4, 9, 11, 13, 15, 20, 22, 23, 25, 27, 35, 37, 39, 43, 44 |
| 15 | Jan. 12 – Jan. 16, 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.
 Final Exam(Comprehensive)date:Tuesday, January 22, 2008 at 07:30 A.M. Scheduled by Registrar Office.