

King Fahd University of Petroleum and Minerals
Department of Mathematical Sciences
(Course Coordinator: Dr. Raja Mohammad Latif)

Syllabus of Math 131 (Finite Mathematics) (Semester: 053: June 24 – Aug. 19, 2006)

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).

| Wk | Date | Section | Material | H/Work |
|----|------------------------------|-----------------------------------|---|---|
| 1 | June 24 To June 28 | 1.1 1.3 3.1 3.2 3.3 | Applications of Equations Applications of Inequalities Lines (Review) Applications & Linear Func Quadratic Functions (Rev.) | 4,12,16,20, 28, 33, 36, 43 2, 4, 6, 7, 9, 10, 12 12, 32, 58, 64, 69, 71 16, 17, 18, 20, 24, 26, 31 27, 29, 31, 34, 36, 39, 40 |
| 2 | July 01 To July 05 | 3.4 3.5 3.6 7.1 | Systems of Linear Equations Nonlinear Systems Applicat.of Systems of Eqns. Linear Inequalit. in Two Var. | 26, 28, 29, 34, 37, 39, 41 6, 9, 12, 14, 15, 16 8, 15, 17, 18, 19, 20, 25 16, 18, 20, 22, 24, 28, 29 |
| 3 | July 08 To July 12 | 7.2 7.3 6.4 6.5 | Linear Programming Multiple Optimum Solutions Method of Reduction Reduction in Matrix Algebra | 10, 13, 14, 15, 16, 17, 18 1, 2, 3, 4 17, 23, 27, 29, 30, 31, 32 8, 10, 12, 19, 21, 24 |
| 4 | July 15 To July 19 | 7.4 7.8 5.1 5.2 | The Simplex Method The dual(Exclude Example 3) Compound Interest Present Value | 5, 8, 12, 16, 17, 18, 19 4, 10, 12, 13, 14, 15, 17 8,10, 12, 18, 19, 23. 24, 26 4, 8, 10, 11, 14, 16, 21 |
| 5 | July 22 To July 26 | 10.3 5.3 8.1 8.1 8.2 | Interest Compound. Contin. Annuities Basic Counting Principle & Permutations Comb and Other Count Prin. | 5, 10, 12, 14, 16, 19, 20 16, 18, 22, 24, 26, 28, 29 6, 8, 10, 22, 25, 26, 29, 32, 35, 36, 38, 40 10,14, 18, 23, 25,26, 30,33 |
| 6 | July 29 To August 02 | 8.3 8.4 8.5 8.5 8.6 | Sample Spaces and Events Probability Conditional Probability Conditional Probability(Cntd) Independent Event | 3, 6, 3, 6,9,14,22,26,28,29 4,10,16,19,21,23,24,27, 31 2, 9, 12, 14, 16,17, 23, 24, 26, 36, 37, 39, 41, 49, 51 2,7,13,20,23,25,27,29,31,35,36 |
| 7 | August 05 To August 09 | 9.1 9.2 9.2 16.2 16.3 | Discr. Rand Var.& Exp.Value The Binomial Distribution. Bin. Distribution (Continued) The Normal Distribution Normal Approx. to Bin.Distr. | 4, 5, 9, 11, 15, 16, 18, 20 4, 5, 10, 12, 17, 19, 20, 23, 25, 26 2, 10, 14, 17, 19, 20, 21 1, 3, 5, 6, 7, 8, 9, 10 |
| 8 | August 12 To August 14 | 11.1 Suppl. 11.2 | Frequency Distribution Measurs of Central Tendency Measurs of Variations | 2, 4, 9, 11, 13, 15, 20, 22, 23, 25, 27, 35, 37, 39, 43, 44 5, 8, 10,12,13,24, 25, 26,33,36. |

*KFUPM policy regarding attendance/DN will be enforced. Tue. July 04, 2006: Last day for dropping courses without permanent record, Tue. July 18, 2006: Last day for dropping courses with grade of "W" thru Internet. Sat. July 29, 2006: Last day for withdrawal from all courses with grade of "W" thru Internet, Major Exam I: Saturday, July 15, 2006. Major Exam II: Saturday, August 05, 2006.