

King Fahd University of Petroleum and Minerals
 University Diploma Program
 Syllabus of MATH 011 (043)
 (Mr. Luai Al-Labadi)

Course #: Math 132

Title : Applied Calculus

Textbook: *Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences*, by Ernest F. Haeussler, Jr. & Richard S. Paul, 10th ed. (2002).

Week	Date	Section	Material	Homework
1	July 2-6	11.1 11.2 11.4 12.1	Limits Limits(continued) Continuity The Derivative	17,18,32,34,38 2,15,23,36,41,52 2,6,11,15,23,32 4,12,16,20,28
2	July 9-13	12.2 12.3 12.4 12.5 12.6	Rules for Differentiation The Derivative as a Rate of Change Differentiability and Continuity Product and Quotient Rules The Chain Rule and Power Rule	23,38,43,44,73 5,12,18,22,28,40 11, 29, 32 9,27,40,46,54,71 5,21,44,56,62,71
Major Exam I: Saturday, 16-7-2005				
3	July 16-20	13.1 13.2 13.3 13.4 13.5 14.1	Derivatives of Logarithmic Functions Derivatives of Exponential Functions Implicit Differentiation Logarithmic Differentiation Higher Order Derivatives Relative Extrema	8,12,29,44,48,50 6,18,27,32,37,39 9,18,28,32,34 2,8,13,17,22,25 2,7,13,24,35,38 3,6,29,39,58,65
4	July 23-27	14.2 14.3 14.4 14.5 15.1	Absolute Extrema on a Closed Interval Concavity The Second-Derivative Test Asymptotes Applied Maxima and Minima	3,8,12 3,19,34,59,63,68 2,8,13,14 11,14,30,39,46 2,3,5,8,21,25
Major Exam II: Saturday, 30-7-2005				
5	July 30- August 3	15.2 16.1 16.2 16.3	Differentials The Indefinite Integral Integration with Initial Conditions More Integration Formulas	7,13,20,26,35,38 9,20,22,40,47,51 4,8,11,14,21,22 9,15,35,53,60,82
6	August 6-10	16.4 16.7 16.8 16.9 17.1	Techniques of Integration The Fundamental Theorem of Integral Calculus Area Area between Curves Integration by Parts	6,18,30,44,48,55 14,31,40,47,49 9,15,20,24,31,34 1,5,30,31,32 8,18,24,28,32
Major Exam III: Saturday, 13-8-2005				
7	August 13-17	17.3 Hand-out 19.1 19.2	Integration by Tables Derivatives and Integrals of Trig. Functions Functions of Several Variables Partial Derivative	12,30,40,47,54 6,12,15,18 6,18,20,28,34
8	August 20-22	19.5 19.7	Higher Order Partial Derivatives Maxima and Minima for Functions of Two Variables	6,9,13,16,20,21 8,15,19,22,29

Evaluation Policy	Exam I: 15 %	Exam II: 15 %	Exam III: 15 %	Final Exam (Comprehension & MCQ): 40 %
	Class Work: (Quizzes, Home work, Class Attendance) 15%			

Course Regulations:

- KFUPM policy with respect to attendance will be enforced.
Warning I: 4 absences, **Warning II:** 8 absences, **DN:** 12 absences
- Each H.W. is due every Monday in class. 20% will be deducted from the grade of each one day late.
- Students are expected to be responsible about all the problems that are given by the assigned textbook and the instructor.