

King Fahd University of Petroleum and Minerals
 Department of Mathematical Sciences
 Syllabus of MATH 132 (042)
 (Dr.Adnan Jibril)

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	Feb. 12-16	11.1 11.2	Limits Limits(continued)	17,18,32,34,38 2,15,23,36,41,52
2	Feb. 19-23	11.4 12.1	Continuity The Derivative	2,6,11,15,23,32 4,12,16,20,28
3	Feb. 26-Mar.-02	12.2 12.3 12.4	Rules for Differentiation The Derivative as a Rate of Change Differentiability and Continuity	23,38,43,44,73, 5,12,18,22,28,40
4	Mar 05-09	12.5 12.6	Product and Quotient Rules The Chain Rule and Power Rule	9,27,40,46,54,71 5,21,44,56,62,71
5	Mar 12-16	13.1 13.2 13.3	Derivatives of Logarithmic Functions Derivatives of Exponential Functions Implicit Differentiation	8,12,29,44,48,50 6,18,27,32,37,39 9,18,28,32,34
6	Mar 19-23	13.4 13.5 14.1	Logarithmic Differentiation Higher Order Derivatives Relative Extrema	2,8,13,17,22,25 2,7,13,24,35,38 3,6,29,39,58,65
7	Mar 26-30	14.2 14.3	Absolute Extrema on a Closed Interval Concavity	3,8,12 3,19,34,59,63,68
8	Apr 02-06	14.4 14.5 15.1	The Second-Derivative Test Asymptotes Applied Maxima and Minima	2,8,13,14 11,14,30,39,46 2,3,5,8,21,25
Apr. 7th – Apr. 15th : Inter semester break				
9	Apr 16-20	15.2 16.1	Differentials The Indefinite Integral	7,13,20,26,35,38 9,20,22,40,47,51
10	Apr 23-27	16.2 16.3	Integration with Initial Conditions More Integration Formulas	4,8,11,14,21,22 9,15,35,53,60,82
11	Apr 30-may 04	16.4 16.7 16.8	Techniques of Integration The Fundamental Theorem of Integral Calculus Area	6,18,30,44,48,55 14,31,40,47,49 9,15,20,24,31,34
12	May 07-11	16.9 17.1	Area between Curves Integration by Parts	1,5,30,31,32 8,18,24,28,32
13	May 14-18	17.3 Hand-out 19.1	Integration by Tables Derivatives and Integrals of Trig. Functions Functions of Several Variables	12,30,40,47,54 6,12,15,18
14	May 21-25	19.2 19.5	Partial Derivatives Higher Order Partial Derivatives	6,18,20,28,34 6,9,13,16,20,21
15	May 28-jun 01	19.7	Maxima and Minima for Functions of Two Variables	8,15,19,22,29

* KFUPM attendance policy will be enforced.

* Suggested times for major exams : **First Major** : March 15th 2005

Second Major : April 26th 2005

* Final Exam is comprehensive.