

King Fahd University of Petroleum & Minerals  
 Department of Mathematical Sciences  
 Math 132 Syllabus (141)  
 (Instructor: Dr. Rajai Alassar, 5-311)  
[\(http://faculty.kfupm.edu.sa/math/alassar/\)](http://faculty.kfupm.edu.sa/math/alassar/)

Textbook: *Introductory Mathematical Analysis for Business, Economics, and the life and Social Sciences*, by Ernest F. Haeussler, Jr. Richard S. Paul, & R. J. Wood, 13<sup>th</sup> Ed. (2011).

Week	Date	Section	Material	Homework
1	Aug 31-Sep 04	10.1 10.2 10.3	Limits Limits (cont'd) Continuity	18, 22, 32, 40, 43 2, 15, 30, 39, 45, 50, 52, 58 6, 11, 22, 30, 36
2	Sep 7-11	11.1 11.2 11.3	The derivative Rules for differentiation The derivative as a rate of change	12, 15, 18, 20, 25, 27 22, 33, 60, 72, 78, 85 8, 10, 12, 16, 21, 27, 40, 41
3	Sep 14-18	11.4 11.5	Product &quot;quot; rule The chain rule & the power rule	9,15 , 28,37,57,66 2, 8, 10, 20, 28, 40, 42, 62
4	Sep 21-25	12.1 12.2	Derivative of logarithmic functions Derivative of exponential functions	16 ,18 ,20 ,24 ,28 ,30 ,32, 50 10, 14, 16, 22, 28, 30, 38,39
<b>Eid Vacation</b>				
5	Oct 12-16	12.4 12.5 12.7	Implicit differentiation Logarithmic differentiation Higher order derivative	10, 14, 20, 22, 30, 34 7, 10, 14, 18, 20, 27 2, 8, 14, 30, 33, 35
6	Oct 19-23	13.1 13.2 13.3	Relative extrema Absolute extrema on a closed interval Concavity	16, 18, 30, 38, 48, 52 2, 10, 12 12, 28, 40, 42, 60, 68
7	Oct 26-30	13.4 13.5 13.6	The second derivative test Asymptotes Applied maxima and minima	5, 6, 8, 10, 12 14, 20, 22, 34, 35, 45 4, 15, 18, 22, 26
8	Nov 2-6	14.1 14.2	Differentials The indefinite integral	12, 14, 20, 22, 29 8, 10, 18, 27, 30, 45
9	Nov 9-13	14.3 14.4 14.5	Integration with initial conditions More integration formulas Techniques of integration	5, 7, 11, 14,15 9, 12, 15, 33, 35, 52 6, 12, 23, 30, 40, 44, 53,63
10	Nov 16-20	14.7 14.9	Fundamental theorem of calculus Area between curves	16,36 ,42 ,44,48 1, 3, 5, 20, 33, 37,46,58
11	Nov 23-27	15.1 15.3	Integration by parts Integration by tables	6, 8, 12, 18, 20, 24, 32
12	Nov 30-Dec 4	Handout	Derivative and integrals of trigonometric Functions	
13	Dec 7-11	17.1	Partial derivatives	2,8, 18, 20, 24, 30, 35
14	Dec 14-18	17.4	Higher order partial derivatives	6, 8, 12, 18, 20,21, 23
15	Dec 21-25	17.6	Maxima and minima	4, 9, 17, 19, 22, 26, 29
16	Dec 28		Normal Tuesday Class (Review)	

Exam I (25%): October 22, 2014

Exam II (25%): November 26, 2014

Classwork (15%)

Final Exam (35%)

Important Dates and Academic Calendar: <http://regweb.kfupm.edu.sa>, KFUPM Attendance Policy will be enforced.