## King Fahd University of Petroleum and Minerals Department of Mathematical Sciences

## **SYLLSBUS**

(Semester III 2000-2001) ( 003 ) (A. Al-Shakhs)

Course #: **MATH 102** Course Title: Calculus II

Textbook: Calculus, A New Horizon; by Howard Anton, sixth edition (1999)

Wk#	Date	Sec. #	Material	Homework	
1	Jun 24 - 27	4.1	Inverse Functions	19,26,30,34,49	
1	0 dii 2 i 2 /	4.2	Logarithmic and Exponential Functions	14,24,31,36-b,48,57	
		4.4	Derivatives of Log. And Expo. Functions	7,28,32,38,46,48,60-b	
2	Jun 30 - July 4	4.5	Der. Of Inverse Trig. Functions	13-a,26,29,36-b,40,45	
1 ~	Juli 30 July 1	5.1-5.3	Selected Problems	5.1(24),5.2(15-b),5.3(42)	
		6.1-6.5	Selected Problems	6.1(31),6.2(15),6.4(14)	
		7.3	Selected Problems	6.5(36),7.3(19-36-46)0	
		4.7	L'Hopital's Rule and Indeterminate Forms	14,30.35,49-c,52,60	
July	July 2 Last day of dropping courses without permanent record .				
3	Jul 7 –11	7.9	Log Functions From Integral point of view	4-a,11-b,22,34,35,39	
	Jul / -11	8.1	Area between two curves	2,8,16,26,31	
		8.2	Volumes by Slicing: Disks and Washers	2,10,22,27,31,47	
		8.3	Volumes by Cylindrical Shells	2,12,16,27	
4	Jul 14 – 18	8.3	Continued	2,12,10,27	
	Jul 14 – 10	8.4	Length of a Plane Curve	8,14,19,26	
		8.5	Area of a Surface of Revolution	4,8,21,24,26	
		8.8	Hyperbolic Functions and Hanging Cables	15,22,36,40,42,52,58-a,68	
		9.1	An Overview of Integration Methods	10,21,26	
July 16 is the Last day of dropping courses with W					
5	July 21 - 25	9.2	Integration by Parts	6,14,22,23,36,50-a,53-a	
]	July 21 - 23	9.3	Trigonometric Integrals	8,12,30.50,64	
		9.3	Trigonometric Substitutions	10,22,26,36,44	
		9.5	Trigonometric Substitutions	6,12,20,22,33,42	
Tuly '	25 Last day of dro		torm with W	0,12,20,22,33,42	
6	July 28 – Aug 1	9.6	Special Substitutions(pp 546-549)	58,61,68,71	
U	July 20 - Aug 1	9.0	Improper Integrals	2-a,10,16,26,31,42,50-b,51,56-	
		9.0	improper integrals	b,66	
		11.1	Sequences	4-a,9,18,21,28,33,46	
		11.1	Monotone Sequences	6,17,23,26,28	
7	Aug 4 – Aug 8	11.3	Infinite Series	1-c,8,12,20,23,26-b,33	
'	Aug 4 – Aug o	11.3	Convergence Tests	1-a,5-c8-a,18,25,32-b,36	
		11.4	Comparison, Ratio, and Root Tests	2-b,4-b,8,16,21,40,52,54	
1		12.1	Polar Coordinates	4-b,5-b,9-b,12-b,16,20,30,44,66	
Ang	Aug 8 is the last day of withdrawal from all courses with WP / WF				
δ	Aug 11 - 13	12.2 12.3	Tangent Lines and Arc Leng. for Pol. Curves Area in Polar Coordinates	4,6,17,22,36,46,50,53	
<u> </u>		12.3	Area in Polar Coordinates	4,8,10,16,20,22	
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First Major Test will be on Tuesday July 10 \*\*\*\*\* Second Major Test will be on Tuesday 31 KFUPM Policy with respect to absences will be enforced