KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
College of General Studies
Prep-Year Math Program
SYLLABUS
MATH002 – TERM 241

Week	Date	Sec.	Topic	Suggested Review Exercises
1	Aug 25 Aug. 29	2.8	One-to-One Functions and Their Inverses	7,8,9,10,11,12,15,16,20,25,60,62,70
		4.1 4.2	4.1: Exponential Functions 4.2: Natural Exponential Function	4.1: 2,10,16,20,22,24,38 4.2: 10,15,16
2	Sep. 01 Sep. 05	4.3	Logarithmic Functions	4,12,16,22,23,28,32,37,42,71,72,54,56
		4.4	Laws of Logarithms	10,11,16,22,39,44,47,48,52,53,65,66
3	Sep. 08 Sep. 12	4.5	Exponential and Logarithmic Equations	10,36,37,43,48,52,54,66,78,84,85
		5.1	Angle Measure	7,16,25,28,30,32,36,38,42,45,58,60
4	Sep. 15 Sep. 19	5.1	Angle Measure (Continue….)	7,16,25,28,30,32,36,38,42,45,58,60
		5.2	Trigonometry of Right Triangles *	8,10,16,18,34,42,47,48,49
SAUDI NATIONAL HOLIDAY: 22 - 23 September 2024				
5	Sep. 24 Sep. 26	5.3	Trigonometric Functions of Angles	6,10,11,22,28,38,40,41,44,50,53,55,56
		6.2	Trigonometric Functions of Real Numbers	5,12,18,34,47,49,52,53,59,65,70,75,76,
6	Sep. 29 Oct. 03	6.3	Trigonometric Graphs	15,17,23,31,41,44,47,48,49,50,51,52,
		6.4	More Trigonometric Graphs	3,5,8,9,14,16,18,26,2832,33,51,54,56
7	Oct. 06 Oct. 10	6.4	More Trigonometric Graphs Measure (Continue…)	3,5,8,9,14,16,18,26,2832,33,51,54,56
		5.4 6.5	Inverse Trigonometric Functions and their Graphs	4,5,7,10,23,24,25,31,34,40,44,45,48
8	Oct. 13 Oct. 17	7.1	Trigonometric Identities	3,7,11,12,14,15,20,23,26,27,34,41,42,65,71,74,75,83
		7.2	Addition and Subtraction Formulas	6,8,12,15,17,18,19,20,25,33,34,40
9	Oct. 20 Oct. 24	7.2	Addition and Subtraction Formulas (Continue…)	6,8,12,15,17,18,19,20,25,33,34,40
		7.3	Double-Angle, Half-Angle	3,8,11,15,19,22,29,30,33,34,39,41,43,46,51,53,54,69,72
10	Oct. 27 Oct. 31	7.4	Basic Trigonometric Equations	27,33,37,43,45,51,54,55,56
		7.5	More Trigonometric Equations	3,11,14,17,21,24,26,31,333,39,42,43
11	Nov. 03 Nov. 07	9.1 9.2	9.1: Vectors in Two Dimensions 9.2: The Dot Product	9.1:7,11,16,22,28,33,39,46,51,52 9.2: 7,10,17,20,21,23,39,42
		10.1	Systems of Linear Equations in Two Variables	7,12,13,17,35,40,50,55
M I D – T E R M V A C A T I O N: 10 - 14 November 2024				
12	Nov. 17 Nov. 21	10.4	Systems of Nonlinear Equations	3,8,14,26,29,32
		11.1	Matrices and System of Linear Equations	12,17,20,23,26,33,38,39,56
13	Nov. 24 Nov. 28	11.2	The Algebra of Matrices	12,14,15,22,33,36,45,46,50
		11.3	Inverses of Matrices and Matrix Equations	6,14,23,42,45,46
14	Dec. 01 Dec. 05	11.4	Determinants+ Properties of Determinants **	10,12,15,19,23,28,37,63
		12.1	Parabolas (with shifted Parabolas)	5-10,35,38,43,46,47,48,50,56
15	Dec. 08 Dec. 12	12.2	Ellipses (with shifted Ellipses)	5-8,9,16,20,27,30,33
		12.3	Hyperbolas (with shifted Hyperbolas)	5-8,16,18,21,27,28,31,37,40,43,45,49
16	Dec. 15 Dec. 16	12.4	Shifted Conics	5,7,8,11,12,13,17,20, 21,22,23,28
		Rev	Review for Final Exam	

Exclude the following: (Examples and their related concepts)

1.   Sec. 2.8: Example 11.

2.   Sec. 4.5: Examples 12, 13 & 14.

3.   Sec. 5.1: Examples 5, 6 &7.

4.   Sec. 5.3: Example 8.

5.   Sec. 6.3: Examples 6 - 10.

6.   Sec. 5.4 & 6.5: The graphs of sec-1x, csc-1x and cot -1x.

7.   Sec. 7.3: Example 9, 10 & 11.

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8.   Sec. 9.1: Examples 6, 7 & 8.

9.   Sec. 9.2: Examples 4 - 8.

10.   Sec. 11.1: Example 8.

11.   Sec. 11.2: Example 7.

12.   Sec. 11.3: Example 7.

13.   Sec. 11.4: Examples 6. 7 & 8.

14.   Sec. 12.1: Examples 6.

* The cofunction identities from section 7.1 page 574 should be covered.

** Properties of Determinants should be covered