

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
College of Sciences, Prep-Year Math Program
MATH 002 SYLLABUS
TERM 032

Pre-Requisite	MATH 001
Textbook	College Algebra with Trigonometry by Aufmann/Barker/Nation, 4 th Edition, Houghton Mifflin, (2002)
Objectives	The students are expected to develop the comprehension of the course material in English, improve their computational skills and demonstrate writing ability of solutions with logical steps. An emphasis will be given to the understanding of the statement of problem and the mathematical terminology. The medium of instruction will be strictly English from the first <u>day of classes</u> . The course primarily aims at the development of critical thinking among the students through the mathematical concepts studied at the <u>High School level</u> . Word problems will be an important part of the course. MATH 001 will be regarded as a base of this course.

Week#	Date	Text Sections	Topic	Homework Problems
1	Feb. 14-18	4.2	Exponential Functions and Their Graph	32,37,43,63,81,86
		4.3	Logarithmic Functions and Their Graphs	27,40,47,55,72,77
2	Feb. 21-25	4.4	Properties of Logarithmic	7,14,28,38,46,72,76
		4.5	Exponential & Logarithmic Equations	6,16,28,44,78,79
3	Feb. 28-Mar. 3	5.1	Angles and Arcs	10,13,33,47,60,69,72,87
		5.2	Trigonometric Functions of Acute Angles	4,8,17,22,33,42,54,59,73
4	Mar. 6-10	5.3	Trigonometric Functions of Any Angle	5,12,22,29,44,64,68,77,86
		5.4	Trigonometric Functions of Real Numbers	11,15,38,46,55,82,85,93,98
5	Mar. 13-17	5.5	Graphs of Sine and Cosine Functions	5,14,29,50,59,62,79,83
		5.6	Graph of Other Trigonometric Functions	3,15,24,40,44,50,66
6	Mar. 20-24	5.7	Graphing Techniques	8,15,24,29,44,62,92
		6.1	Verification of Trigonometric Identities	11,19,31,54,67
7	Mar. 27-31	6.2	Sum, Difference and Co-function Identities	5,10,15,22,29,33,40,67,80
MIDTERM EXAM SATURDAY APRIL 3 (4.2 - 6.2)				
8	Apr. 3-7	6.3	Double and Half Angle Identities	4,8,11,22,32,41,52,60,77,92
		6.4*	Only Functions of the form $f(x) = a \sin x + b \cos x$	6,99,101
9	Apr. 10-14	6.5	Inverse Trigonometric Functions	16,23,35,53,63,68,78
10	Apr. 17-21	6.6	Trigonometric Equations	13,20,30,42,49,68,78
		7.3	Vectors	4,10,12,19,29,34,48,56,64,76
11	Apr. 24-28	8.1	Parabolas	7,13,16,29,33,54
		8.2	Ellipses	5,14,25,36,39,44,49,72
12	May 1-5	8.3	Hyperbolas	5,10,24,34,38,45,50,65
		9.1	Systems of Linear Equations in Two Variables	4,12,17,40,48,60
13	May 8-12	9.3	Nonlinear systems of Equations	4,11,15,31,46,49
		10.1	Gaussian Elimination Method	7,16,24,28,52,54
14	May 15-19	10.2	The Algebra of Matrices	5,14,23,27,29,36,68
		10.3	The Inverse of a Matrix	3,8,16,22,39
15	May 22-25	10.4	Determinants	8,11,26,29,36,46,50,61
	May 26	Review	Last Day of Classes	

Evaluation Policy	Midterm Exam (MCQ): 24 points	Final Exam (Comprehensive & MCQ): 36 points
	Class Work: (2 written CLASS TESTS, at least 4 WRITTEN quizzes, CAL Activity, Homework, Class Attendance, etc): 40 points	
CAL	The syllabus of the weekly suggested CAL problems is on the back of this sheet. CAL Questions may be asked in the Exams.	
Note # 1: A student will be awarded the GRADE "DN" after missing EIGHT classes without an OFFICIAL excuse. It is the responsibility of the student to keep the record of his absences. Students will have ONLY 6 days to submit their excuses to the prep-year affairs (1 st warning: 3 absences; 2 nd warning: 6 absences; "DN": 8 absences)		
Note # 2: To check your warnings (WEEKLY), Homework Solutions, Exam Locations, and other Math announcements, Please visit Portable 3, Math Bulletin Board (beside PR-108), or www.kfupm.edu.sa/mathprep.		