

**KING FAHD UNIVERSITY OF PETROLEUM & MINERALS**  
**College of Sciences, Prep-Year Math Program**  
**MATH 001 SYLLABUS**  
**TERM 032**

<b>Pre-Requisite</b>	HIGH SCHOOL ALGEBRA
<b>Textbook</b>	College Algebra & Trigonometry by Aufmann /Barker/Nation, 4 <sup>th</sup> Edition, Houghton Mifflin, (2002)
<b>Objectives</b>	The students are expected: to comprehend the material of this course. to improve their computational skills in basic Algebra and Trigonometry to demonstrate their writing ability in Mathematics with logical steps. Please note that the medium of instruction will be strictly ENGLISH from the first day of classes.

Week#	Date	Text Sections	Topic	Homework Problems
1	Feb. 14-18	P-1	The Real Number System	1,6,11,24,30,36,42,58,73
2	Feb. 21-25	P-2	Intervals, Absolute Value and Distance	2,6,14,20,21,35,44,57,60,69,78,86, 100
		P.3	Integer and Rational Number Exponents	
3	Feb. 28-Mar. 3	P-3	Integer and Rational Number Exponents	8,20,42,48,54,85,90,103,111,122,127, 135
		P-4	Polynomials	15,20,33,46,52,61,67,82
4	Mar. 6-10	P-5	Factoring	7,18,25,36,44,53,57,74,83
		P-6	Rational Expressions	6,14,19,36,56,62,70
5	Mar. 13-17	1.1	Linear Equations	3,11,20,26,34,36,44,52,55,70,76
		1.2	Formulas and Applications (Examples #1 and #2) and (table 1.1**) ONLY	2,8,15,20,23,25
6	Mar. 20-24	1.3	Quadratic Equations	9,12,18,31,36,38,45,62,74,80,06,109,123
7	Mar. 27-31	1.4	Other Types of Equations	8,12,21,24,30,36,40,44,58,67
		1.5	Inequalities	7,16,19,28,34,43,62,70,86,92,96,97
<b>MIDTERM EXAM THURSDAY APRIL 1 ( Chapter P- 1.5 )</b>				
8	Apr. 3-7	2.1	A Two-Dimensional Coordinate System and Graphs	15,22,29,38,43,54,65,73,84,91,106
9	Apr. 10-14	2.2	Introduction to Functions	7,9,18,21,38,39,43,49,92,
10	Apr. 17-21	2.3	Linear Functions	10,14,25,37,49,67,70,84,87
		2.4	Quadratic Functions	6,12,16,26,30,44,73,77,81
11	Apr. 24-28	2.5	Properties of Graphs	4,11,15,20,25,30,38,42,51,56,59,78
		2.6	The Algebra of Functions	5,9,25,36,47,62,75,76
12	May 1-5	3.1	Polynomial and Synthetic Divisions	4,16,21,34,43,49,59,61,70,72,75
		3.2	Polynomial Functions	5,9,37,41,46,56,64
13	May 8-12	3.3	Zeros of Polynomial Functions	4,9,17,26,37,45,76
14	May 15-19	3.4	The Fundamental Theorem of Algebra	8,20,41,46,47,57,67
		3.5	Rational Functions and Their Graphs	4,5,18,25,32,35,41,44,54,69
15	May 22-25	4.1	Inverse Functions	4,8,12,28,38,41,54,65,67
	<b>May 26</b>	<b>Review</b>	<b>Last Day of Classes</b>	

<b>Evaluation Policy</b>	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	
<b>CAL</b>	The syllabus of the suggested CAL Problems is on the back of this sheet. CAL Questions may be asked in the Exams.	
<b>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<sup>st</sup> warning: 3 absences; 2<sup>nd</sup> warning: 6 absences; "DN": 8 absences)</b>		
<b>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 <a href="http://www.kfupm.edu.sa/mathprep">www.kfupm.edu.sa/mathprep</a>.</b>		

\*\* : The students are asked to **memorize** the top 5 formulas of (table 1.1, page 72) and **understand** the bottom 5 formulas .