

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

College of Sciences, Prep-Year Math Program

SYLLABUS

MATH 001 (061)

Pre-Requisite	HIGH SCHOOL ALGEBRA
Textbook	College Algebra & Trigonometry by Aufmann /Barker/Nation, 5 th Edition, Houghton Mifflin, (2005)
Objectives	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	Sep. 9-13	P-1	The Real Number System	1,5,8,14,18,26,28,36,40,44,49,62,66,76,82,105,126
14 September is Normal Saturday Classes				
2	Sep. 16-20	P-2	Integer and Rational Number Exponents	5,9,26, 32 ,34,36,38,39,48,70,77,80,88,94,98,105,111
23 September is National Holiday				
3	Sep. 24-27	P-3	Polynomials	6,8,16,20,29,34,38,50,54,62,68,88
		P-4	Factoring	5,1 3,1 7,22,2 8,3 2,4 6,54,58,60,62,68,76,82,87,9 2,94,98
4	Sep. 30-Oct. 4	P-5	Rational Expressions	8,10,14,22,24,34,37,39,44,58,61,76
		P-6	Complex Numbers	6,14,30,36,40,45,54,62,66,80
Exam I: October 7, 2006 [Ch. P]				
5	Oct. 7-11	1.1	Linear and Absolute Value Equations	8,17,22,28,32,42,44,48,64,66
		1.2	Formula and Applications (Examples #1 and #3) and (table 1.2**) ONLY	6,8,10,17,19,20,22
Id al-Fitr Vacation (Oct. 12 – Oct. 27)				
6	Oct. 28-Nov. 1	1.3	Quadratic Equations	4,10,18,25,32,39,42,54,56,57,82,84,86
7	Nov. 4-8	1.4	Other Types of Equations	4,10,16,18,26,32,,33,40,46,48,54,56
		1.5	Inequalities	8,12,16,22,28,35,42,50,60,72,74,78
Midterm Exam: November 14, 2006 [P.1-1.5]				
8	Nov. 11-15	2.1	A Two-Dimensional Coordinate System and Graphs	2,12,16,18,22,28,29,38,48,55,59,63,72,74,76,84,88
9	Nov. 18-22	2.2	Introduction to Functions	7,10,18,19,22,26,36,42,43,55,64,82,84
10	Nov. 25-29	2.3	Linear Functions	10,14,26,32,38,41,47,51,73,76,90,93,97
		2.4	Quadratic Functions	8,17,28,30,34,43,46,58,76,78,86
11	Dec. 2-6	2.5	Properties of Graphs	14,16,20,25,30,32,34,38,42,45,50,60,62,66,70,86
		2.6	The Algebra of Functions	12,18,28,32,40,44,48,60,63,76,80
Exam II: December, 9, 2006 [2.1-2.5]				
12	Dec. 9-13	3.1	The Remainder and the Factor theorem	8,18,27,32,42,50,54,58,70,72
		3.2	Polynomial Functions of Higher Degree	4,8,14,20,26,32,36,40,,46,62
13	Dec. 16-20	3.3	Zeros of Polynomial Functions	2,6,12,20,24,32,34,41,50,55,57
Id al-Adha Vacation (Dec 21- Jan. 5)				
14	Jan. 6-10	3.4	The Fundamental Theorem of Algebra	8,14,37,40,44,46,52
		3.5	Graphs of Rational Functions and Their Applications	3,4,6,8,12,24,28,30,40,46,48,52,65
15	Jan. 13-16	4.1	Inverse Functions	2,6,9,22,24,36,42,44
	Jan. 17	Review	Last Day of Classes	

Evaluation Policy	Exam 1(MCQ): 15 points	Midterm Exam (MCQ): 25 points	Exam 2 (MCQ) : 15 points	Final Exam (Comprehensive & MCQ): 35 points
	Class Work: (quizzes, CAL Activity, Homework, Class Attendance, etc): 10 points			

CAL The syllabus of the weekly CAL Classes 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 (1st warning: 3 absences; 2nd warning: 6 absences; “DN”: 8 absences)

Note # 2: To check your warnings (WEEKLY), Homework Solutions, Exam Locations, and other Math announcements, Please check the Prep-Year website: www.kfupm.edu.sa/mathprep.

Note # 3: During the first week, exam week, and the final week , the CAL class will be Conducted as a regular class.

** : The students are asked to **memorize** the top 5 formulas of (table 1.2, page 91) and **understand** the bottom 5 formulas.

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS

College of Sciences, Prep-Year Math Program

CAL Syllabus

MATH 001 (Term 061)

Textbook: College Algebra with Trigonometry by Aufmann/ Barker / Nation, 5th ed., Houghton Mifflin, (2005)

Note: During the 2nd week of the classes, the class instructor will introduce the CAL software.

Sections in the Textbook	Section Exercises (in Larson's CD)	Tutorial Exercises (In Larson's CD)
P.1 The Real Number System	P.1 6,105,110,25,54,61,64	P.1 1,11,12,14, 5,6,16
P.2 Integer and Rational Number Exponents	P.2 2,4,62	P.2 4,5,21,24,25
P.3 Polynomials	P.3 11,24,32,42,85,92	P.3 3,8,13
P.4 Factoring	P.4 4,8,16,22,50,68,84,104	P.4 1,7,9,12,13
P.5 Rational Expressions	P.5 8,14,24,58,70	P.5 3,5,9,11,12
P.6 Complex Numbers	1.5 4,8,40,84	1.5 1,3,4,9,14
1.1 Linear and Absolute Value Equations	1.2 16,30,38,43,70	1.2 1,8,12
1.2 Formulas and Applications	1.3 10,22,26	1.3 2,3,10,11
1.3 Quadratic Equations	1.4 8,10,14,26,52,89	1.4 1,5,8,15,19
1.4 Other Types of Equations	1.6 4,6,22,20,40,98	1.6 4,7,8,12,14
1.5 Inequalities	1.7 28,52,74,82 1.8 16,61,66	1.7 6,8,10,12,13 1.8 3,4,6,7
2.1 A Two-Dimensional Coordinate System and Graphs	P.7 44,52,68 1.1 72,78	P.7 3,6,7 1.1 6,7
2.2 Introduction to Functions	2.2 16,22,30,36,72	2.2 1,4,11
2.3 Linear Functions	2.1 2,16,42,68,90	2.1 3,4,14
2.4 Quadratic Functions	3.1 18,24,34,54,60	3.1 2,3,4,5
2.6 The Algebra of Functions	2.3 2,14,60 2.4 26,52,66,84	2.3 1,3,4 2.4 2,4,5
3.1 The Remainder Theorem and the Factor Theorem	3.3 22,26,46,56	3.3 3,4,5,7
3.2 Polynomial Functions of Higher Degree	3.2 16,18,56,68	3.2 1,3,6,9,10
3.3 Zeros of Polynomial Functions	3.4 10,30,32,46,56	3.4 1,3,4,9
3.4 The Fundamental Theorem of Algebra	3.5 4,16,42,52	3.5 5,6,9
3.5 Graphs of Rational Functions	4.1 8,12,14 4.2 16,18,19	4.1 1,2,3 4.2 2,5,7,9