

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

College of Applied & Supporting Studies

Prep-Year Math Program

SYLLABUS – MATH 001 (171)

Week#	Date	Text Sections	Topic	Suggested Review Exercises
1	Sep. 17 - 21	Review	Review of Some Arithmetic Operations	Recitation Paper
		P.2	The Real Numbers and Their Properties	10,17,28,32,38,40,44,46,59,60,66,70,76,79,81,82
2	Sep. 25 – 28	P.3	Integer Exponents and Scientific Notation	11,13,18,24,28,30,34,36,38,48
		P.4	Rational Exponents and Radicals	10,17,16,18,20,26,30,36,39,43,48,52,54,57,62,67,78,84,87,90
3	Oct. 01-05	P.4	Rational Exponents and Radicals (Cont ..)	
		P.6	Algebraic Expressions	13,18,22,34,38,44,46,58,62,66,74,76,78,80,86
4	Oct. 7-12	P.6	Factoring	10,14,20,22,30,36,42,46,48,52,60,90,100,108,114
		P.7	Rational Expressions	12,13,16,22,24,32,33,36,51,56,58,64,68,70,72,74,77,82,86,90,94
5	Oct. 15-19	P.8	Solving Basic Equations	10,12,14,28,36,40,49,52,54,66,70,76,77,85,98,100
			Review of Chapter P	
MAJOR EXAM I: Chapter P - TUESDAY, 24 OCT. 2017				
6	Oct. 22-26	1.1	Coordinate plane	28,30,31,39,42,44,45,46,48,
		1.2	Circles	10, 14, 18, 24, 29, 30, 32, 36, 40, 48, 50,56,58,70,74,76,78,79,80,82,84,90,94,96,97,98,100,102,104,
7	Oct. 29 - Nov. 02	1.3	Lines	16,18,22,24,26,30,34,36,38,39,40,42,44,46,48,50,62,64,70,74,78,86
		1.4	Quadratic Equations	12,13,16,20,26,38,48,54,56,61,62,65,66,67,68,70,85(Section 1.4) 70, 72 (Section 1.5)
8	Nov. 05-09	1.5	Complex Numbers	
		1.6	Solving Other Types of Equations	6,14,18,22,24,28,32,36,38,40,42,44,46,48,50,54,56,58,60,62,66,68,69,70,71
9	Nov. 12-16	1.7	Solving Inequalities	22,32,38,42,48,51,54,56,60,61,64,68,70
		1.8	Absolute Value Equations and Inequalities	10,12,20,22,28,30,36,46,48,52,54,56
10	Nov. 19-23	2.1	Functions	20,22,30,34,36,38,40,44,48,49,51,52,54,56,58,60,62,64,66,68,72
		2.2 & 2.3	Graphs of Functions ; Increasing and Decreasing functions	6,10,16,8,20,22,24,26,28,36,40,45,50,52,54,56,59,60,64,66,68 (Section 2.2) 32,34,35 (Section 2.3)
MAJOR EXAM II : 1.1 – 2.5 - THURSDAY, 30 NOV. 2017				
11	Nov. 26-30	2.5	Linear Functions	7,10,12,13,15,17,19,24,27,28,29
		2.6	Transformation of Functions	8,10,12,14,16,18,19,21,22,24,40,48,52,54,58,60,62,66,68,70,72,75,85,86,88,89,90,93
12	Dec. 3-7	2.7	Combining Functions	5,6,14,15,17,18,19,29,44,54,55,56,59,60,63,64,65,70,73,74
		3.1	Quadratic Functions	6,12,16,20,27,29,37,42,48,51
13	Dec. 10-14	3.3	Dividing Polynomials	5,6,11,13,17,26,29,35,37,43,44
		3.2	Polynomial Functions and their Graphs (Exclude Real Maxima and Minima of Polynomials)	3,4,9,10,18,20,24,31,34,36,38,45,50,53,55,57,60,62,63,65,68,70
14	Dec. 17-21	3.4	Real Zeros of Polynomials (Exclude Upper and lower bounds Theorem)	5,6,12,13,15,21,26,29,34,39,42,45,48,50,55,60,63,66,68,
		3.5	Complex Zeros and Fundamental Theorem of Algebra	7,9,13,17,18,23,31,37,41,45,47,58,64,66,67,69,72
15	Dec. 24-28	3.6	Rational Functions (Exclude Slant Asymptotes and end Behavior)	10,12,15,17,21,24,26,32,33,35,45,53,55,59,63,67
		Rev	Review for final exam	
F I N A L EXAM: January 7, 2018 – 12:30 PM [P.2 – 3.6]				

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Textbook: Algebra and Trigonometry, by J.Stewart, L.Redlin and S.Watson (Fourth edition 2014)

Upon completion of Prep year Math 001 course, a student should be able to :

- (1) Perform basic algebraic operations
- (2) Recognize the concepts of functions, graphs and properties of functions and solve related equations.
- (3) Use algebraic, numerical, and graphical processes to manipulate and analyze equations, inequalities, and functional relationships.
- (4) Derive a correct solution for a given mathematical problem and interpret the outcome correctly

Note: The medium of instruction will be strictly ENGLISH from the first day of classes.

Grading Policy:

1. Exam I: 20% a common multiple choice exam.
2. Exam II: 20% a common multiple choice exam.
3. Final Exam: 36% a comprehensive common multiple choice exam.
4. Class Work: 18% based on a minimum of 5 quizzes (10%), 1 class tests (8%); *Any quiz or test under class activity should be of written type and not of a multiple choice type.*
5. Online homework (6%).

Unexcused absence: *Starting from the fifth time being absent, $\frac{1}{2}$ point will be deducted for each absence from the total grade.*

Exam Questions: All exam questions are similar to the textbook exercises and examples, recitations, and online homework problems.

Missing an Exam: No makeup exam will be given under any circumstance. When a student misses Exam I or Exam II for a legitimate reason (such as medical emergencies), his grade for this exam will be determined based on the Department's policy. Furthermore, the student must provide an official excuse within one week of the missed exam.

Attendance:

A student will be awarded the GRADE "DN" after missing 8 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)

Website: <http://www.kfupm.edu.sa/sites/pypmath/>