DAMMAM COMMUNITY COLLEGE

Course Syllabus MATH 011 (172)

Programme	**All programs**
Course Title	**Preparatory Math I**
Course Code	**Math011**
Status	**Preparatory Year Program**
Credit Hours	**4**
Contact Hours	**4 hours Lectures**
Pre-requisites (if any)	**High School Algebra**
Text Book	**Algebra and Trigonometry, by J. Stewart, L. Redlin and S. Watson (Fourth edition)**
Instructional Strategies	**3 Class Lectures per week and One day Class Tutorial(Recitation), Weekly Homework's (On-line) graded on time, Daily Homework's (Practice-not graded)**
Instructor(s)	**Coordinated Course by: (Mr. Abed, Dr. Majid, Dr. Alsaggaf, Dr. Bouketir)** **Mr. Nizar Abed – Office Hrs. 12:00-1:50pm and 8:40-9am on Sundays & Tuesdays** **Others by appointment. Office No.:269-3 Tel.:013-868-3300 Ext.869** **Email:abedn@dcc.kfupm.edu.sa**
Course Description	***This course primarily aims at the development of critical thinking among the students through the mathematical concepts studied at the high school level. Word problems will be an important part of the course.***
Students Learning Outcomes (SLO #)	**Upon successful completion of the Math011 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.**

Week#	Date	Text Sections	Topic	Suggested Review Exercises
1	Jan. 21- Jan.25	Review	Review of Some Arithmetic Operations	Recitation Paper
2	Jan. 28- Feb.01	P.2	The Real Numbers and Their Properties	10,17,28,32,38,40,44,46,59,60,66,70, 76,79,81,82
		P.3	Integer Exponents and Scientific Notation	11,13,18,24,28,30,34,36,38,48
3	Feb. 04- 08			
		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
4	Feb. 11- 15	P.5	Algebraic Expressions	13,18,22,34,38,44,46,58,62,66,74,76, 78,80,86
		P.6	Factoring	10,14,20,22,30,36,42,46,48,52,60,90, 100,108,114
Class test # 1 Monday February 19, 2018 [P2- P6]				
5	Feb. 18- 22	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
		P.8	Solving Basic Equations	10,12,14,28,36,40,49,52,54,66,70,76,77,85,98,100
M A J O R E X A M I : Chapter P [P.2-P.8] Tuesday February 27th , 2018				
6	Feb. 25- Mar.01	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, 50,56,58,70,74,76,78,79,80,82,84,90,94,96,97,98,1 00,102,104,
7	Mar.04- 08	1.3	Lines	16,18,22,24,26,30,34,36,38,39,40,42,44,46,48,50,6 2,64,70,74,78,86
		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	Mar.11- 15	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	Mar.18- 22	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
Class test # 2 Monday March 26, 2018 [1.1 – 1.8]				
10	Mar.25- 29	2.1	Functions	20,22,30,34,36,38,40,44,48,49,51,52,54,56,58,60,6 2,64,66,68,72
		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)**
M A J O R E X A M II : [1.1-2.5] Wednesday April 4th, 2018				
11	Apr. 01- 05	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	Apr. 08- 12	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	Apr. 15- 19	3.2	Dividing Polynomials	5,6,11,13,17,26,29,35,37,43,44
		3.3	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	Apr. 22- 26	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	Apr. 29-May 03	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 E X A M : Saturday May,12,2018 at 12:30pm [P.2 – 3.6]				

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

Course Assessment

Method	Learning Outcomes to be covered	Period	Type	Percentage
Class tests	**Class test #1: Learning outcomes : LO1 represented by P.2 to P.6**	***Monday 19th February, 2018***	**Written**	**8 %**
	Class test # 2: Learning outcomes: LO1 represented by Sec.1.1 to Sec.1.8	***Monday 26th March ,2018***	**Written**	**8 %**
Attendance	***Taken daily throughout the semester***			**2 %**
Homework	**Online homework assignment every week .Open link: https://www.webassign.net/**			**6 %**
Major Exam I	**Material from P.2 to P.8 Learning outcomes: LO1 and LO4 represented by [P.2 to P.8]**		**M.C.Q's**	**20 %**
Major Exam II	**Material from section 1.1 to section 2.5 Learning outcomes: LO1 and LO4 represented by [Sec.1.1 to Sec.2.5]**		**M.C.Q's**	**20 %**
Final Exam	**Material from P.2 to Sec. 3.6, All sections as listed in the syllabus, "COMPREHENSIVE ". Learning outcomes: LO1 to LO4**		**M.C.Q's**	**36 %**

Grades Distribution

Grades distribution always determined by Kfupm Math preparatory year coordinator and director at end of the semester from grade "C" and up for all students on both campuses (KFUPM and DCC) and it is unified. Grades below "C" at DCC determined by DCC coordinator based on given range of distributed grades and gets approved by the DCC Dean. For DCC math prep. year students standardized grade distribution is not usually the norm.

Reference

Electronic Materials, Web Sites etc
http://www.kfupm.edu.sa/sites/pypmath/

http://www.kfupm.edu.sa/sites/pypmath/default.aspx#

Exam Rules

- Questions of all exams are based on examples, syllabus homework problems in addition to online home works, recitations, and exercises from the textbook.
- **No makeup** for major exams or Class Tests will be given under any circumstance. When a student misses an exam for a legitimate reason (such as medical emergencies), his mark for this exam will be determined based on the Department's policy. Furthermore, the student must submit an official excuse, within one week of the missed exam to the student affairs office.
- No student will be allowed to sit for a final examination after the lapse of 30 minutes from the beginning of the examination. Also, no student will be allowed to leave the examination venue less than 30 minutes after the beginning of the examination.
- No cell phones are allowed to be in the exams rooms or halls during all exams or class tests.

Feedback Policy

Marking Scheme/key solution will be published to the students electronically(Kfupm math prep. year website) almost in the next lecturing day after the assessment due date of the major exams and class tests. The major exams and class tests results will be announced to the students within almost one week from the exam date.

Academic Integrity

- *Cheating* is an act of dishonesty and faculty members and students must maintain trust and honesty to ensure and protect the integrity of grades.
- All academic work or requirements assigned to a student must be carried out by him without any unauthorized aid of any kind. If any instance of dishonesty by a student in homework assignments or any other requirements of the course is discovered the instructor will take the appropriate action.
- *Cheating* or attempting to cheat, or violating instructions and examination regulations shall render the offender subject to punishment in accordance with Student Disciplinary Rules as issued by the College Council.
- Any Talking with others or looking into their papers during exam time is presumed an attempt of cheating and the above mentioned rule will be applied.

Attendance	• If you are late by **5 minutes** you will be considered absent . It is per instructors discretion. Door may be locked on time. • A student will be awarded the GRADE "**DN**" after missing **12** 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 student affairs office. • Student will be given a DN grade if the number of his **unexcused** absences reaches 20% of the lecture and laboratory sessions scheduled for the course. Student will be given a DN grade if the number of his **excused** absences reaches 33% of the lecture and laboratory sessions scheduled for the course. Instructors should warn students with high number of absences of getting DN and advise them to withdraw in time in case they could not continue attending lectures, to avoid getting DN since the DN grade lowers their CGPA while the W grade do not.
Class Rules	• Food and drink are not allowed in the class. • Mobiles should be **switched off** or be in **silent mode** during the lecture time.