FOUNDATION PROGRAM | MATH UNIT

COURSE SYLLABUS

TERM-1 (2016-2017)

Course Title : **INTERMEDIATE ALGEBRA**

Course Code : **FPM 101A – Level 1 – BASIC**

Teaching Load : **Five (5) hours weekly**

Mr. Syed Salman Mahmood **(Math *Coordinator*)** Email : syed_mahmood@du.edu.om Tel : 23 23 71 75, Ext. 7175 Office : 224 A	**Instructors:** **Mr. Mohammad Mahmood Mustafa** m_mustafa@du.edu.om **Dr. Zahid Shareef** Zahid@du.edu.om **Wesam Samih Al-Karadsheh** Wesam@du.edu.om **Waqar Ahmed Khan** wkhan@du.edu.om **Dr. Wajdi Hamza Dawood Al Redany** walredany@du.edu.om **Tareq Al Khushban** kalkhshpan@du.edu.om

Recommended Text Book:

College Algebra by Raymond.A.Barnett, Michael R. Ziegler, Karl. E. Byleen Mc Graw Hill, November 1999, 7th Edition.

DU – Vision:

Dhofar University aspires to occupy a recognized position among the institutions of quality higher education.

DU – Mission:

Dhofar University strives to achieve excellence in teaching, research and community service, in an open learning environment conducive to creativity and innovation and to the acquisition of cutting-edge professional knowledge.

DU - Values:

The core values of Dhofar University are:

1. Academic excellence
2. Individual responsibility
3. Continuous improvement
4. Active citizenship
5. Long-Life learning

▫ رؤية البرنامج :

يتطلع البرنامج التأسيسي إلى احتلال مكانة مرموقة بين البرامج التأسيسية في السلطنة من خلال توفير تعليم ذات جودة عالية

▫ رسالة البرنامج :

يسعى البرنامج التأسيسي لتزويد الطلبة بتعليم ذات جودة عالية يستند الى معايير المخرجات التعليمة في بيئة تشجع على التميز و التعلم المستمر.

▫ قيم البرنامج :

- التميز الأكاديمي
- تحمل المسؤولية الفردية
- تحسين القدرات الذاتية باستمرار
- المواطنة الفاعلة
- التعلم ال

Math Unit – Mission:

Our mission is to provide students with a learning environment in which they can master the skills and concepts necessary for their success in college level Mathematics.

Learning Objectives:

* Acquiring the knowledge necessary for further study of mathematics at higher levels and for pursuing the study of other curricular subjects.

* Mastering the language of mathematics and using it to solve real-life problems that may face students now or in the future.

* Enhancing students' intellectual abilities and self-confidence, and encouraging renovation and innovation by allowing them to uncover relationships and conceive mathematical patterns and models.

* Developing the mathematical sense in students and employing mathematical methods in life and in other subjects.

Learning Outcomes:

At the end of the course, the student will be able to:

- Obtain the common factors, factoring by grouping, factoring second degree polynomials and special factoring rules
- Reduce rational expressions and apply different operations**.**
- Identify Exponent and Radical formulas, and simplify expressions
- Differentiate between all types of Linear Equations and Inequalities.
- Can solve, draw a graph, and write the interval notation of Linear Equations and Inequalities.
- Can write the equation of a circle and draw its graph.
- Can graph lines and solve quadratic equations and define the concept of the Slope and different form of lines.

Academic Honesty:

Students are expected to complete all work with the highest standard of honesty and integrity. Plagiarism, forgery, cheating or any form of academic misconduct will not be tolerated. Any of the above may cause a student's final course grade to be lowered significantly or the student may receive a failing grade, depending on the severity of the offence. Plagiarism is the presentation of the work of another as one's own work. (Refer to DU catalogue)

Plagiarism:

Plagiarism is a particular form of cheating and you must avoid it at all costs. Any case of plagiarism will be given zero in that section of assessment.

Class Management:

- Students are required to arrive to all classes on time.
- Use of mobile phone is not allowed during the lecture time. You must, therefore, switch off your mobile phone before you enter the lecture room.

Attendance Regulation:

Level	1st warning Hours of absences	Final warning Hours of absences	Withdrawal
Math 1 & 2	5%	15%	25%

Students will receive copies of warning letters in their DU email.

Evaluation and Grading:

Students who show dedication and commitment to their studies and class work, homework and Presentation will be noted. In case of borderline grading, student's efforts will be reviewed.

Quiz-1	Mid Term	Quiz-2	Final Exam	CA	Final Grade
10 %	30%	10%	40 %	10 %	100 %

Continuous Assessment (CA) (10%):

Attendance + Class Participation + Assignments	**10 %**

Useful Links / Websites:

http://www.wtamu.edu/academic/anns/mps/math/mathlab/int_algebra/index.htm

http://www.purplemath.com/modules/index.htm

http://library.thinkquest.org/20991/alg2/index.html

http://math2.org/math/trig/identities.htm

http://library.thinkquest.org/20991/alg2/trig.html

http://msenux.redwoods.edu/math/courses/math120.php

http://archives.math.utk.edu/topics/algebra.html

Study Plan – Level 1 – Math – Topics to be covered during Term-1

Weeks (Dates)	Topics To Be Covered	Remarks
Week 1 (04/09/16 – 08/09/16)	**Registration & Orientation**	
Week 2 (11/09/16 – 15/09/16)	**Eid Al-Adha Holidays**	
Week 3 (18/09/16 – 22/09/16)	**Basic Algebraic Operations** **1.3** Factoring (common Factors, By grouping, 2nd degree polynomials, special factoring rules)	
Week 4 (25/09/16 – 29/09/16)	**Continue:** Factoring **1.4** Reducing Rational Expressions: Basic Operations	
Week 5 (02/10/16 – 06/10/16)	**Continue:** Reducing Rational Expression **1.5** Integer Exponents	**Quiz-1 10% (06/10/16)**
Week 6 (09/10/16 – 13/10/16)	**Continue:** **1.5** Integer Exponents Revision for Quiz-1	
Week 7 (16/10/16 – 20/10/16)	**1.7** Radicals	
Week 8 (23/10/16 – 27/10/16)	**Mid-Term Exam Week**	**Mid-Term Exam 30%**
Week 9 (30/10/16 – 03/11/16)	**Equations & Inequalities** **2.1** Linear Equations and Applications **2.3** Linear Inequalities.	
Week 10 (06/11/16 – 10/11/16)	**2.4** Quadratic Equations (By using Quadratic Formula) **Graphs, Basic Tools and Straight Lines** **3.1** Distance Formula & Circle	
Week 11 (13/11/16 – 17/11/16)	**Graphs, Basic Tools and Straight Lines** **3.2** Straight Lines (Graphing Straight Lines, Slope and Equation of a Line)	
Week 12 (20/11/16 – 24/11/16)	**Continue:** Straight Lines	**Quiz-2 10% (24/11/16)**
Week 13 (27/11/16 – 01/12/16)	**Basic Trigonometry** Pythagoras Theorem & Trigonometric Ratios	
Week 14 (04/12/16 – 08/12/16)	**Revision & Final Exam**	**Final Exam 40 %**
Week 15 (11/12/16 – 15/12/16)	**Marking, Moderation & Finalizing Grades**	