KINGDOM OF SAUDI ARABIA
Ministry of Higher Education
AL-IMAM MUHAMMAD IBN SAUD
ISLAMIC UNIVERSITY

Deanship of Preparatory Programs

المملكة العـــــربية السعودية
وزارة التعليم العالي
جامعة الإمام محمد بن سعودالإسلامية
عمادة البرامج التحضيرية
قسم الرياضيات بكلية العلوم

Syllabus

Summer Semester 1437/1438 Hijri

Course Code	Course Name	Credit Hours	Lec	Lab	Tut.	Pre-requisite
MAT 042	Mathematics-2 for Applied Sciences	4	3	0	1	Mat 041 (Precalculus1)

Course Supervisor	Dr. EmadSelouma
e-mail	Emadms74@gmail.com
office	SR-73
Class Meetings	As scheduled

Course's Objectives: This is the second course in of Precalculus Track Applied Science for Preparatory Year Programs In this course students will be using Logic and Fundamental Methods of Proofsandtrigonometric identities, the law of sines and cosines, and vectors; solving parametric equations, polar equations, conic sections; using discrete mathematics, including probabilities; and applying these skills in real-world situations.

Text Book: Precalculus 2 Track of Applied ScienceDept of Mathematics, PEARSON Education**Website:**

Grading:

- Attendance …….5%
- Participation …….. 5%
- Quizzes (around 5 quizzes, 4% each)…….. 20%
- Mid-term Examination……30% (Around Week 4)
- Final Exam …….. 40%
- **TOTAL…….. 100**

Classroom Participation: It is expected that you participate in the discussion at lectures by asking and answering questions, raising issues, and making observations and constructive comments.

Cheating and Dishonesty: Each student should write and submit his own work either on exams or on exercises and other course material. Any kind of cheating or dishonesty throughout the course is considered a serious offence and will be dealt with strictness and no mercy.

Attention: Don't use or leave open your mobile phone throughout lectures. Violating this may result in lowering your grad or expelling from the classroom

Course schedule

Week	Date	Chapter	Sections and topics	
1		Review and Registration		
Week 1 8/10/1438 : 12/10/1438H & Week 2 15/10/1438 : 19/10/1438 H	2/7/2017 : 6/7/2017 9/7/2017 13/7/2017	Chapter 2: **Sequences, Series, and Probability**	Sequences and Arithmetic Sequences	Quiz 1
			Series and Arithmetic Series	
			Geometric Sequences and Series	
			Counting and Permutations	Quiz 2
			Combinations, Labeling, and the Binomial Theorem	
			Mathematical Induction	
Week 2 15/10/1438 : 19/10/1438 H & Week 3 22/10/1438 : 26/10/1438 H	9/7/2017: 13/7/2017 16/7/2017 20/7/2017	Chapter 6: **Conic Sections**	Conics	
			The Parabola	
Week 4 29/10/1438 : 4/11/1438 H	23/7/2017: 27/7/2017	Chapter 6: **Conic Sections**	The Ellipse	Quiz 3
			The Hyperbola	
Week 5 7/11/1438 : 11/11/1438 H	30/7/2017 3/8/2017	Chapter 3: **Trigonometry**	Angles and Their Measurements	Quiz 4
			Right Triangle Trigonometry	
			The Sine and Cosine Functions	
			The Law of Sines	
			The Law of Cosines	
Week 6 14/11/1438 : 18/11/1438 H	6/8/2017 10/8/2017	Chapter 3: **Trigonometry**	The Graphs of the Sine and Cosine Functions	Quiz 5
			The Inverse Trigonometric Functions	
			Basic Identities	
			Verifying Identities	
Week 7 21/11/1438: 25/11/1438 H	13/8/2017 17/8/2017	Chapter 3: **Trigonometry** & **Revision**	Sum and Difference Identities & Revision	
28/11/1438: 2/12/1438 H	20/8/2017: 24/8/2017	**Final Examinations**		