

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
College of Applied & Supporting Studies
Prep-Year Math Program
SYLLABUS – MATH 002 (253)

Week #	Date	Text Sections	Topic
1	June 14-18	2.8	One-to-One Functions and Their Inverses
		4.1&4.2	Exponential Functions and The Natural Exponential
		4.3	Logarithmic Functions
		4.4	Laws of Logarithms
2	June 21-25	4.5	Exponential and Logarithmic Equations
		5.1	Angle Measure
		5.2	Trigonometry of Right Triangles *
		5.3	Trigonometric Functions of Angles
3	June 28-July. 2	6.2	Trigonometric Functions of Real Numbers
		6.3	Trigonometric Graphs
		6.4	More Trigonometric Graphs
		5.4 & 6.5	Inverse Trigonometric Functions and their Graphs
MAJOR EXAM 1 – (2.8-6.2) – June 30, 2026			
4	July 5-9	7.1	Trigonometric Identities
		7.2	Addition and Subtraction Formulas
		7.3	Double-Angle, Half-Angle
5	July 12-16	7.4	Basic Trigonometric Equations
		7.5	More Trigonometric Equations
		9.1 & 9.2	9.1: Vectors in Two Dimensions 9.2: The Dot Product
		10.1	Systems of Linear Equations in Two Variables
		10.4	Systems of Nonlinear Equations
MAJOR EXAM 2 – (6.3-10.1) – July 19, 2026			
6	July 19-23	11.1	Matrices and System of Linear Equations
		11.2	The Algebra of Matrices
		11.3	Inverses of Matrices and Matrix Equations
		11.4	Determinants + Properties of Determinants**
7	July 26-30	12.1	Parabolas (with shifted Parabolas)
		12.2	Ellipses (with shifted Ellipses)
		12.3	Hyperbolas (with shifted Hyperbolas)
		12.4	Shifted Conics
8	August 2-3		Review of the material

