

King Fahd University of Petroleum and Minerals  
Preparatory Year Program

SUMMER STARS 2024  
SYLLABUS - College Algebra

Week	Topic
WEEK 1	Real Numbers
	Integer Exponents and Scientific Notation
	Rational Exponents and Radicals
	Algebraic Expressions
	Factoring
WEEK 2	Rational Expressions
	Solving Basic Equations
	The Coordinate plane
	Graphs of Equations in Two Variables; Circles
	<b>ASSESSMENT 1</b>
	Lines
	Solving Quadratic Equations
	Complex Numbers
	Solving Other Types of Equations
	WEEK 3
Solving Absolute Value Equations and Inequalities	
Functions	
Graphs of Functions; Getting Information from the Graph of a Function	
<b>ASSESSMENT 2</b>	
Linear Functions	
Transformations of Functions	
Combining Functions	
WEEK 4	Quadratic Functions
	Polynomial Functions and their Graphs
	Dividing Polynomials
	Real Zeros of Polynomials
	Complex Zeros and the Fundamental Theorem of Algebra
	Rational Functions
<b>FINAL ASSESSMENT</b>	