

Intermediate Algebra with Applications

Course Information

Course Number 10-804-118

Credits 4

Description

This course offers algebra content with applications. Topics include properties of real numbers, order of operations, algebraic solution for linear equations and inequalities, operations with polynomial and rational expressions, operations with rational exponents and radicals, algebra of inverse, logarithmic and exponential functions.

Schedule		
Session	Target Competencies	Notes
Week 1	Apply properties of real number systems Evaluate expressions	Quiz 1
Week 2	Solve linear equations	Homework 1, Quiz 2
Week 3	Solve linear inequalities	Homework 2, In-class Activity 1
Week 4	Use the Cartesian coordinate system Demonstrate graphing skills on the Cartesian coordinate plane	In-class Activity 2, Quiz 3
Week 5	Analyze linear equations	Test 1, Homework 4
Week 6	Apply properties of functions and relations Solve systems of equations and inequalities	In-class Activity 3, Homework 5
Week 7	Apply properties of exponents Perform basic operations with polynomials	Homework 6, Quiz 4
Week 8	Graph functions and relations	In-class Activity 4, Quiz 5
Week 9	Factor polynomials Solve equations using factoring	Test 2, homework 7
Week 10	Evaluate rational expressions Solve equations involving rational expressions	Homework 8, In-class Activity 5
Week 11	Evaluate radical expressions Solve radical equations	Quiz 6, Homework 9
Week 12	Operate within the complex number system	In-class Activity 6, Quiz 7
Week 13	Solve quadratic equations	Quiz 8, Homework 10
Week 14	Use Algebra functions	Homework 11, In-class Activity 7
Week 15	Apply properties of exponential and logarithmic functions	Quiz 9, In-class Activity 8
Week 16		Homework 12, Test 3