

Intermediate Algebra with Applications Syllabus

Course Information

Organization	Blackhawk Technical College
Course Number	10-804-118
Credits	4
Instructor	Instructor Name
E-mail Address	Instructor E-mail Address
Office	Instructor Office
Office Hours	Instructor Office Hours and availability
Office Phone	Instructor Phone

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.

Prerequisites

- Algebra 1.0 And - Geometry 1.0 And - ASSET Numerical Skills 45 Or - Algebra 1.0 And - Geometry 1.0 And - Compass Algebra 046 Or - Algebra 1.0 And - Geometry 1.0 And - ACT Math 20 Or 804-110 Elem Algebra w Apps

Textbooks

Intermediate textbook approved by math department.

Learner Supplies

Graphing Calculator.

Core Abilities

- A. Communicate Professionally
- B. Use Appropriate Technology
- C. Work Effectively in Teams
- D. Demonstrate Professional Work Behavior
- E. Show Respect for Diversity
- F. Solve Problems Efficiently
- G. Lead by Example

Competencies

- 1. Apply properties of real number systems
- 2. Evaluate expressions
- 3. Solve linear equations
- 4. Solve linear inequalities

5. Use the Cartesian coordinate system
6. Demonstrate graphing skills on the Cartesian coordinate plane
7. Analyze linear equations
8. Apply properties of functions and relations
9. Solve systems of equations and inequalities
10. Apply properties of exponents
11. Perform basic operations with polynomials
12. Graph functions and relations
13. Factor polynomials
14. Solve equations using factoring
15. Evaluate rational expressions
16. Solve equations involving rational expressions
17. Evaluate radical expressions
18. Solve radical equations
19. Operate within the complex number system
20. Solve quadratic equations
21. Use Algebra functions
22. Apply properties of exponential and logarithmic functions

Grading Information

Grading Rationale

Your grade will be determined by 4 items: Tests, Quizzes, Homework, and Participation during class and in Learning Activities.

Homework: Rubrics and/or checklists will be available for each. These assignments allow you to demonstrate that you can meet the course competencies.

Participation during class and in Learning Activities: Your active participation in each activity is essential for successful completion of the course. Feedback will be given periodically.

Tests and Quizzes: Quizzes may be given online and tests will be given in the classroom.

Course Grade Calculation

Tests(3) 45%

Quizzes: 15%

Homework: 25%

Participation: 15%

Remember that earning a grade below a C will not allow the student to count the course for the program.

Grading Scale

A	94-100
A-	90 up to but not including 94
B+	87 up to but not including 90
B	83 up to but not including 87
B-	80 up to but not including 83
C+	77 up to but not including 80
C	72 up to but not including 77
C-	68 up to but not including 72
F	below 68

Guidelines for Success

ADA

If you have a documented disability and would like information about support services and accommodations, please contact disability support service staff at (608) 757-7796 or in room 2209 at Central Campus. Please discuss your approved accommodations with me during office hours or after class and be sure to allow at least one week to arrange appropriate classroom or testing accommodations.

Academic Honesty

See the Student Handbook. The information about academic honesty is found in the Student Code of Conduct. This instructor expects academic honesty and follows the college policies.

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