

# Algebra Prep 3 – 1<sup>st</sup> 8 Weeks

ASC 93 Algebra Prep 3 (2 semester credits)

**Course Description:** This course is a continuation of Algebra Prep 2 as a beginning level algebra course. Topics covered include operations of linear equations, factoring, simplifying radical, rational expressions and quadratic equations. This class does not satisfy college graduation requirements for math.

**Prerequisite(s):** none

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	Monday	
	Tuesday	
	Wednesday	
	Thursday	
	Friday	
	<b><u>Office Hours:</u></b>	

**Course Requirements:** Learning algebra is an investment of time. Algebra is learned best by practice, reflect, and practice some more. Understanding the steps in the topic explanations and video presentations is a good start. However, to truly know the material, you should be able to look at a problem, know how to proceed, and carry out the steps without assistance. There are multiple attempts in completing the homework which helps to provide opportunities for you to get to that point. It is expected to invest a minimum of 2 hours per semester credit hours outside of the classroom. Students are expected to be active learners in the classroom activities which helps enhance the students learning experience. Learning will take place utilizing the following; MyMathLab, in-class activities, supplemental instruction provided by the instructor; project; homework, and tests/exams.

**Course Objectives/Student Outcomes:** The students will be able to:

- Demonstrate an understanding of terms and rules used in algebra.
- Utilize the rules of exponents to simplify exponential expressions.
- Utilize problem solving strategies to solve problems.
- Simplify and solve equations and expressions.
- Perform the basic algebraic operations with polynomials.
- Factor trinomials using a variety of techniques.
- Utilize the quadratic formula to identify solutions to quadratic equations.

- Perform basic algebraic operations to simplify radical and rational expressions.
- Analyze and solve various types of math problems.
- Gain the skills need to participate in MATH 103 College Algebra.

**Relationship to Campus Theme:** This course introduces algebra skills that are used to solve problems in science, technology, business and social sciences. These problems will require critical thinking and interaction with other students.

**Grading Criteria:** Your grade will be weighted on the following:

Homework	25%
In-Class Activities	25%
Tests/Exams	35%
Project	15%

Final letter grades are assigned based on the following:

A	90% - 100%	B	80% - 89%
C	70% - 79%	D	60% - 69%
F	≤ 59%		

**Late Homework/Assignments:** It is the **responsibility of the student** to obtain an assignment if they are absent on the day it is given. If a student is absent on the day the assignment is due, it is his/her responsibility to get the assignment to the instructor **on time**. Missed assignments will be graded as a zero. In class activities are meant to be completed in class. Late tests/exams will not be given unless prior approval from the instructor is given.

**Schedule (subject to change):**

Date	Topic
January 13 <sup>th</sup>	<ul style="list-style-type: none"> <li>✓ Welcome!</li> <li>✓ MyMathLab</li> <li>✓ Overview of Course</li> </ul>
January 14 <sup>th</sup>	<ul style="list-style-type: none"> <li>✓ 6.1 Remove a Common Factor</li> <li>✓ 6.2 Factoring by Grouping</li> <li>✓ 6.3 Factoring Trinomials of the Form <math>x^2 + bx + c</math></li> </ul>
January 16 <sup>th</sup>	<ul style="list-style-type: none"> <li>✓ 6.4 Factoring Trinomials of the Form <math>ax^2 + bx + c</math></li> <li>✓ 6.5 Special Case Factoring</li> <li>✓ 6.7 Solving Quadratic Equations by Factoring</li> </ul>
January 19 <sup>th</sup> – Martin Luther King, Jr. Day	No Class
January 20 <sup>th</sup>	<ul style="list-style-type: none"> <li>✓ 7.1 Simplifying Rational Expressions</li> <li>✓ Chapter 6 Homework Due by 11:59PM</li> </ul>
January 21 <sup>st</sup>	<ul style="list-style-type: none"> <li>✓ 7.2 Multiplying and Dividing Rational Expressions</li> </ul>

January 23 <sup>rd</sup>	✓ 7.3 Adding and Subtracting Rational Expressions
January 26 <sup>th</sup>	✓ Mid-Chapter Review (7.1 – 7.3)
January 27 <sup>th</sup>	✓ 7.4 Simplifying Complex Rational Expressions
January 28 <sup>th</sup>	✓ 7.5 Solving Equations Involving Rational Expressions
January 30 <sup>th</sup>	✓ 7.6 Ratio, Proportion and Other Applied Problems
February 2 <sup>nd</sup>	✓ Second- Half Chapter Review (7.4 – 7.6)
February 3 <sup>rd</sup>	✓ Chapter 7 Review
February 4 <sup>th</sup>	✓ Chapter 7 Test ✓ Chapter 7 Homework Due by 11:59 PM
February 6 <sup>th</sup>	✓ 8.1 Rational Exponents
February 9 <sup>th</sup>	✓ 8.2 Radical Expressions and Functions
February 10 <sup>th</sup>	✓ 8.3 Simplifying, Adding, and Subtracting Radicals
February 11 <sup>th</sup>	✓ Mid-Chapter Review (8.1 – 8.3)
February 13 <sup>th</sup>	✓ 8.4 Multiplying and Dividing Radicals
February 16 <sup>th</sup>	✓ 8.5 Radical Equations
February 17 <sup>th</sup>	✓ 8.6 Complex Numbers
February 18 <sup>th</sup>	✓ Chapter 8 Review
February 20 <sup>th</sup>	✓ Chapter 8 Test ✓ Chapter 8 Homework Due by 11:59 PM
February 23 <sup>rd</sup>	✓ 9.1 Quadratic Equations
February 24 <sup>th</sup>	✓ 9.2 The Quadratic Formula and Solutions to the Quadratic Equation
February 25 <sup>th</sup>	✓ 9.3 Equations that Can Be Transformed Into Quadratic Form
February 27 <sup>th</sup>	✓ Chapter 9 Review
March 2 <sup>nd</sup>	✓ Chapter 9 Review ✓ Chapter 9 Homework Due by 11:59 PM
March 3 <sup>rd</sup>	✓ Chapter 9 Test
March 4 <sup>th</sup>	✓ Final Exam Review ✓ History of Math Paper DUE
March 6 <sup>th</sup>	✓ Final Exam