

## 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 and rational expressions. This class does not satisfy college graduation requirements for math.

**Prerequisite(s):** none

<b>Harmony Richman</b> <b>Email:</b> harmony.richman@vcsu.edu <b>Phone:</b> 701- 845-7685 <b>Office Location:</b> Rhodes 104E  <b>Course Website:</b> <a href="http://algebraprep123.wikispaces.com/">http://algebraprep123.wikispaces.com/</a>  <b>Textbook:</b> <i>Beginning and Intermediate Algebra by Tobey, Slater, Blair, and Crawford 4<sup>th</sup> edition.</i> With MyMathLab access code.	<b><u>Class Schedule:</u></b>	
	Monday	
	Tuesday	
	Wednesday	
	Thursday	
	Friday	
	<b><u>Office Hours:</u></b> MTWF 11 – 11:50; 1 – 1:50 and by appointment	

**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 using greatest common factor, factor by grouping, factor trinomials of the form  $ax^2 + bx + c$  and factor special case polynomials.

- 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 14 <sup>th</sup>	<ul style="list-style-type: none"> <li>✓ Welcome!</li> <li>✓ MyMathLab</li> <li>✓ Overview of Course</li> </ul>
January 15 <sup>th</sup>	<ul style="list-style-type: none"> <li>✓ 2.1 – The Addition Principles of Equality</li> <li>✓ 2.2 – The Multiplication Principle of Equality</li> <li>✓ 2.3 – Using the Addition and Multiplication Principles Together</li> </ul>
January 17 <sup>th</sup>	<ul style="list-style-type: none"> <li>✓ 2.4 – Solving Equations with Fractions</li> <li>✓ 2.5 – Translating English Phrases into Algebraic Expressions</li> <li>✓ 2.6 – Using Equations to Solve Word Problems</li> <li>✓ 2.8 – Solving Inequalities in One Variable</li> </ul>
January 20 <sup>th</sup> – Martin Luther King, Jr. Day	No Class

January 21 <sup>st</sup>	✓ 6.1 – Removing a Common Factor
January 22 <sup>nd</sup>	✓ 6.2 – Factoring by Grouping
January 24 <sup>th</sup>	✓ 6.3 – Factoring Trinomials of the Form $x^2 + bx + c$
January 27 <sup>th</sup>	✓ 6.4 – Factoring Trinomials of the Form $ax^2 + bx + c$
January 28 <sup>th</sup>	✓ 6.5 – Special Cases of Factoring
January 29 <sup>th</sup>	✓ 6.6 – A Brief Review of Factoring
January 31 <sup>st</sup>	✓ 6.7 Solving Quadratic Formulas by Factoring
February 3 <sup>rd</sup>	✓ Chapter 6 Review
February 4 <sup>th</sup>	✓ Chapter 6 Test
February 5 <sup>th</sup>	✓ 7.1 - Simplifying Rational Expressions
February 7 <sup>th</sup>	✓ 7.1 – Simplifying Rational Expressions, continued
February 10 <sup>th</sup>	✓ 7.2 – Multiplying and Dividing Rational Expressions
February 11 <sup>th</sup>	✓ 7.3 – Adding and Subtracting Rational Expressions
February 12 <sup>th</sup>	✓ 7.4 – Simplifying Complex Rational Expressions
February 14 <sup>th</sup>	✓ 7.5 – Solving Equations Involving Rational Expressions
February 17 <sup>th</sup> – President’s Day	No Class
February 18 <sup>th</sup>	✓ 7.5 – Solving Equations Involving Rational Expressions, continued
February 19 <sup>th</sup>	✓ 7.6 – Ratio, Proportion, and Other Applied Problems
February 21 <sup>st</sup>	✓ Chapter 7 Review
February 24 <sup>th</sup>	✓ Chapter 7 Test
February 25 <sup>th</sup>	✓ 8.1 – Rational Exponents
February 26 <sup>th</sup>	✓ 8.2 – Radical Expressions and Functions
February 28 <sup>th</sup>	✓ 8.3 – Simplifying, Adding, and Subtracting Radicals
March 3 <sup>rd</sup>	✓ 8.4 – Multiplying and Dividing Radicals
March 4 <sup>th</sup>	✓ 8.5 – Radical Equations
March 5 <sup>th</sup>	✓ Chapter 8 Review
March 7 <sup>th</sup>	✓ Chapter 8 Test