# Algebra Prep 3 - $1^{\text {st }} 8$ 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

| Harmony Richman <br> Email: harmony.richman@vcsu.edu <br> Phone: 701- 845-7685 <br> Office Location: Rhodes 104E | Class Schedule: |  |
| :---: | :---: | :---: |
|  | Monday |  |
|  | Tuesday |  |
|  | Wednesday |  |
| Course Website: | Thursday |  |
| www.mrsrichmanprep.weebly.com | Friday |  |
| book. | Office Hours: |  |
| Beginning and Intermediate Algebra by Tobey, Slater, Blair, and Crawford 4th edition. With MyMathLab access code. |  |  |

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 | $\leq 59 \%$ |  |  |

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 |
| :---: | :---: |
| August 26 ${ }^{\text {th }}$ | $\checkmark$ Welcome! <br> $\checkmark$ MyMathLab <br> $\checkmark$ Overview of Course |
| August 27 ${ }^{\text {th }}$ | $\checkmark$ 6.1 Remove a Common Factor <br> $\checkmark$ 6.2 Factoring by Grouping <br> $\checkmark$ 6.3 Factoring Trinomials of the Form $\mathrm{x}^{2}+\mathrm{bx}+\mathrm{c}$ |
| August 29th | 6.4 Factoring Trinomials of the Form $\mathrm{ax}^{2}+\mathrm{bx}+\mathrm{c}$ <br> $\checkmark$ 6.5 Special Case Factoring <br> $\checkmark$ 6.7 Solving Quadratic Equations by Factoring |
| September 1st - Labor Day | No Class |
| September $2^{\text {nd }}$ | $\checkmark$ 7.1 Simplifying Rational Expressions |
| September $3^{\text {rd }}$ | 7.2 Multiplying and Dividing Rational Expressions |
| September $5^{\text {th }}$ | $\checkmark$ 7.3 Adding and Subtracting Rational Expressions |


| September 8 ${ }^{\text {th }}$ | $\checkmark$ Mid-Chapter Review (7.1-7.3) |
| :---: | :---: |
| September 9 ${ }^{\text {th }}$ | $\checkmark$ 7.4 Simplifying Complex Rational Expressions |
| September $10^{\text {th }}$ | 7.5 Solving Equations Involving Rational Expressions |
| September $12^{\text {th }}$ | 7.6 Ratio, Proportion and Other Applied Problems |
| September $15^{\text {th }}$ | $\checkmark$ Second- Half Chapter Review (7.47.6) |
| September 16 ${ }^{\text {th }}$ | $\checkmark$ Chapter 7 Review |
| September 17th | $\checkmark$ Chapter 7 Test <br> $\checkmark$ Chapter 6 and 7 Homework Due by 11:59 PM |
| September 19th | $\checkmark$ 8.1 Rational Exponents |
| September 22 ${ }^{\text {nd }}$ | $\checkmark$ 8.2 Radical Expressions and Functions |
| September 23 ${ }^{\text {rd }}$ | 8.3 Simplifying, Adding, and Subtracting Radicals |
| September 24 ${ }^{\text {th }}$ | $\checkmark$ Mid-Chapter Review (8.1-8.3) |
| September $26^{\text {th }}$ | $\checkmark$ 8.4 Multiplying and Dividing Radicals |
| September 29th | $\checkmark$ 8.5 Radical Equations |
| September 30 ${ }^{\text {th }}$ | $\checkmark$ 8.6 Complex Numbers |
| October $1^{\text {st }}$ | $\checkmark$ Chapter 8 Review |
| October $3^{\text {rd }}$ | $\checkmark$ Chapter 8 Test <br> $\checkmark$ Chapter 8 Homework Due by 11:59 PM |
| October $6^{\text {th }}$ | $\checkmark$ 9.1 Quadratic Equations |
| October 7th | $\checkmark$ 9.2 The Quadratic Formula and Solutions to the Quadratic Equation |
| October $8^{\text {th }}$ | $\checkmark$ 9.3 Equations that Can Be Transformed Into Quadratic Form |
| October 10 ${ }^{\text {th }}$ | $\checkmark$ Chapter 9 Review |
| October 13 ${ }^{\text {th }}$ | $\checkmark$ Chapter 9 Review <br> $\checkmark$ Chapter 9 Homework Due by 11:59 PM |
| October 14th | $\checkmark$ Chapter 9 Test |
| October 15 ${ }^{\text {th }}$ | $\checkmark$ Final Exam Review <br> $\checkmark$ History of Math Paper DUE |
| October 17th | $\checkmark$ Final Exam |

