

FALL 2015 SYLLABUS

- COURSE: Math 095 Algebra CRN 30138 / 30137
- DAY AND TIME: Monday/Wednesday/Friday 10:00-10:50 am and 9:00-9:50 am
- ROOM: E221 and D122
- INSTRUCTOR: D. Patrick Colburn
- EMAIL: patrickcolburn@sbcglobal.net
- TEXTBOOK: Elementary & Intermediate Algebra: 5th Edition - Baratto & Bergman
- COURSE DESCRIPTION: Specific outcomes on back.
The course develops understanding of number systems, different representations of numbers, operations on numbers, including numbers expressed in scientific notation. The course also introduces functions, their graphs, and modeling relationships between quantities using functions. Topics include simplifying expressions with integer exponents, using radicals, solving, analyzing and modeling linear equations, solving systems of linear equations, using the Pythagorean Theorem and using geometric formulas to solve real world problems. This course does not count towards the minimum requirements for graduation.
- MEASUREMENTS: There will be a test after every chapter. Grades will be determined by finding the arithmetic mean of all assessments. Homework equates to ½ Chapter Assessment (each based on a check, check minus, and zero nature) as will final exam. Any missing homework may be passed in before the administration of the relevant assessment.
- ACADEMIC HONESTY: At TRCC, we expect the highest standards of academic honesty. The Board of Regents' Prescribed Conduct Policy prohibits cheating on examinations, unauthorized collaboration on assignments, or plagiarism. Anyone caught cheating will receive an "F" for that exam.
- MAKE-UP TESTS: Any test missed on a scheduled day will be made up during the instructor's discretionary day.
- HOMEWORK: Will be collected daily. Place on my desk as you enter the room.
- EXTRA HELP: Available by appointment.
- *NO CELL PHONES

You will be responsible for the following sections of the text:

Chapter 0. Prealgebra Review

- 0.1 A Review of Fractions
- 0.2 Real Numbers
- 0.3 Adding and Subtracting
- 0.4 Multiplying and Dividing
- 0.5 Exponents and the Order of Operations

Chapter 1. From Arithmetic to Algebra

- 1.1 Transition to Algebra
- 1.2 Evaluating Algebraic Expressions
- 1.3 Simplifying Algebraic Expressions
- 1.4 Solving Equations with the Addition Property
- 1.5 Solving Equations with the Multiplication Property
- 1.6 Combining the Rules to Solve Equations
- 1.7 Linear Inequalities

Chapter 2. Functions and Graphs

- 2.1 Formulas and Problem Solving
- 2.2 Sets and Set Notation
- 2.3 Two-Variable Equations
- 2.4 The Cartesian Coordinate System
- 2.5 Relations and Functions
- 2.6 Tables and Graphs

Chapter 3. Graphing Linear Functions

- 3.1 Graphing Linear Functions
- 3.2 The Slope of a Line
- 3.3 Linear Equations

Chapter 4. Systems of Linear Equations – Use of Calculator TI-84

- 4.1 Graphing System of Linear Equations
- 4.2 Solving Systems of Equations in One Variable Graphically
- 4.3 Systems of Equations in Two Variables

Chapter 5. Exponents and Polynomials

- 5.1 Positive Integer Exponents
- 5.2 Integer Exponents and Scientific Notation
- 5.3 An Introduction to Polynomials
- 5.4 Adding and Subtracting Polynomials
- 5.5 Multiplying Polynomials
- 5.6 Dividing Polynomials (Objective 1 only)

Chapter 7. Radicals and Exponents

- 7.1 Roots and Radicals (Objectives 1, 2, 4)