



Master Syllabus

MATH 0083 – Algebraic Foundations

Revision Date: August 14, 2018

Previous Revision Dates (list all): 3/2018

Course Credit Value: 3

If taught in a 15 week semester, students spend the following clock hours, each week in:

Lecture: 3

Laboratory: 0

Clinical Experience/Internship/Workplace experience: 0

Pre and/or Co Requisites:

Pre-Requisite(s): ACT MATH score of 18 or below, or COMPASS Algebra score of 30 or below, or ACCUPLACER Elementary Algebra score of 64 or below.

Concurrency: None

Co- Requisite(s): None

Equivalency SLCC: LFMA 0083

Equivalency BOR: NA

Course Description: MATH 0083 is a course that covers operations with real numbers, linear equations and inequalities in one variable, linear equations in two variables, operations with polynomials, factoring of polynomials, rational expressions, solving quadratic equations by factoring and using the quadratic formula, roots and simple radicals. A scientific calculator is required; a graphing calculator is optional. This course is a skills improvement course that cannot be used for certificate or degree programs. A grade of "C" or better is required for enrollment in MATH 1105.

Student learning Outcomes:

As a result of successful completion of this course the student will be able to:

1. Solve linear equations and simple linear inequalities in one variable and quadratic equations by factoring and using the quadratic formula.
2. Graph the equation of a line using various methods.
3. Write equations of lines given various criteria.
4. Perform arithmetic operations on, evaluate and completely factor polynomials.
5. Simplify rational expressions completely.

Course Content:

NOTE: The intention of this master course syllabus is to provide you with an overview of the contents of this course, as specified by the faculty of South Louisiana Community College. Please note: individual course syllabi will reflect the diversity of individual approaches to course material and assessment.
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- I. Real Numbers and Solving Equation
 - A. Operations with Real Numbers
 - B. Linear Equations in One Variable
 - C. Linear Inequalities in One Variable
- II. Linear Equations in Two Variables
 - A. Cartesian Coordinate System and Linear Equations
 - B. Slope-Intercept Form
 - C. Point-Slope Form
- III. Polynomials
 - A. Addition and Subtraction with Polynomials
 - B. Multiplication with Polynomials
 - C. Introduction to Factoring Polynomials
 - D. Factoring Trinomials
 - E. Special Factoring Techniques
- IV. Rational Expressions
 - A. Simplifying Rational Expressions
 - B. Multiplication with Rational Expressions
 - C. Division with Rational Expressions
- V. Quadratic Equations
 - A. Solving Quadratic Equations
 - B. The Quadratic Formula

Methods of Delivery: Lecture

Assessment: Student learning in this course will be monitored and measured using a minimum of the following: homework from the software program, 4-5 major chapter tests and a comprehensive departmental final exam. Additional items that may be used are quizzes, midterm exam, writing assignments, collaborative projects, problem solving activities and problems from the e-book.

Grading Scale: A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: 0-59

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