# 1/2/2024

# brcc keystone logo

Baton Rouge Community College

*Academic Affairs Master Syllabus*

Date Approved: 11 January 2024

Term and Year of Implementation: Fall 2024

**Course Title:** Co-Requisite for Math 1213 College Algebra

**BRCC Course Rubric:** MATH 0213

**Previous Course Rubric**: SPSM 0213

**Lecture Hours per week-Lab Hours per week-Credit Hours**: 3-0-3

**Per semester: Lecture Hours-Lab Hours-Instructional Contact Hours**: 45-0-45

**Louisiana Common Course Number:**

**CIP Code:** 32.0104

**Course Description:** Provides supplemental instruction to the material taught in MATH 1213, College Algebra, which introduces students to essential algebraic skills to be successful at the college/university level. This course provides students with intensive supplemental instruction intended to reinforce their mathematics skills while also furthering their awareness of campus resources and study skill techniques.  Students will receive a final grade of "S" (satisfactory) or "U" (unsatisfactory) for this course.

**Prerequisites:**  None

**Co-requisites:** None

**Suggested Enrollment Cap:** 30

**Learning Outcomes.** *Upon successful completion of this course, the students will be able to:*

1. Solve various types of equations, inequalities, and application problems.

2. Perform operations with exponents and polynomials.

3. Write equation of lines.

4. Factor polynomials.

5. Perform basic function skills including identifying, evaluating, graphing, sketching, and determining domain and range of relations.

**Assessment Measures.** Assessment of all learning outcomes will be measured using the following methods:

1. Instructor-created exams, quizzes and classwork/homework.

2.

3.

4.

5.

6.

**Information to be included on the Instructor’s Course Syllabi:**

* ***Disability Statement*:** Baton Rouge Community College seeks to meet the needs of its students in many ways. See the Office of Disability Services to receive suggestions for disability statements that should be included in each syllabus.
* ***Grading:*** The College grading policy should be included in the course syllabus. Any special practices should also go here. This should include the instructor’s and/or the department’s policy for make-up work. For example in a speech course, “Speeches not given on due date will receive no grade higher than a sixty” or “Make-up work will not be accepted after the last day of class”.
* ***Attendance Policy*:** Include the overall attendance policy of the college. Instructors may want to add additional information in individual syllabi to meet the needs of their courses.
* ***General Policies*:** Instructors’ policy on the use of things such as beepers and cell phones and/or hand held programmable calculators should be covered in this section.
* ***Cheating and Plagiarism*:** This must be included in all syllabi and should include the penalties for incidents in a given class. Students should have a clear idea of what constitutes cheating in a given course.
* ***Safety Concerns:*** In some courses, this may be a major issue. For example, “No student will be allowed in the lab without safety glasses”. General statements such as, “Items that may be harmful to one’s self or others should not be brought to class”.
* ***Library/ Learning Resources:*** Since the development of the total person is part of our mission, assignments in the library and/or the Learning Resources Center should be included to assist students in enhancing skills and in using resources. Students should be encouraged to use the library for reading enjoyment as part of lifelong learning.

**Expanded Course Outline:**

I. Equations, Inequalities, and Problem Solving

A. Solve Linear Equations

B. Application Problems with Linear Equations

C. Use Formulas and Solve Literal Equations

D. Solve and Graph Inqualities

II. Equations, Graphs of Lines and Functions

A. The Slope-Intercept Form of a Linear Equation

B. The Point-Slope Form of a Linear Equation

C. Graph Linear Equations

D. Introduction to Functions

E. Find Domain and Range of Relations

F. Identify and Evaluate Functions

G. Graph Nonlinear Functions

III. Polynomials and Factoring

A. Exponent Rules including Negative Exponents

B. Operations of Polynomials

C. Greatest Common Factor

D. Factoring by Grouping

E. Factoring Trinomials

F. Special Factoring Formulas and General Review of Factoring

G. Solve Polynomial Equations by Factoring

IV. Rational Expressions and Equations

A. Simplify Rational Expressions

B. Find Restricted Values

C. Perform Operations with Rational Expresssions

D. Solve Rational Equations

V. Radical Expressions and Equations

A. Introduction to Roots and Rational Exponents

B. Simplify Radicals

C. Rationalize Denominator

D. Introduction to Complex Numbers

E. Solve Radical Equations

VI. Quadratic Equations

A. Solve Quadratic Equations Using Factoring

B. Solve Quadratic Equations Using Square Root Property

C. Solve Quadratic Equations Using Completing the Square

D. Solve Quadratic Equations Using Quadratic Formula