Miami Dade College

Course Description

MAC1105L | College Algebra Co-Requisite Lab | 1.00 credits

Students will remediate high school mathematics knowledge to prepare themselves for college algebra concepts, while reinforcing concepts being learned in college algebra and applying their knowledge to real world applications. In this course, students will develop problem solving skills, critical thinking, computational proficiency, and contextual fluency through the study of equations, functions, and their graphs. Emphasis will be placed on quadratic, exponential, and logarithmic functions. Topics will include solving equations and inequalities, definition and properties of a function, domain and range, transformations of graphs, operations on functions, composite and inverse functions, basic polynomial and rational functions, exponential and logarithmic functions, and applications.

Course Competencies:

Competency 1: The student will remediate concepts needed for College Algebra by:
1. Participating in group activities and working on concepts needed to be successful in college algebra.
2. Participating in group activities comparing and Interrupting each other's work.
3. Participating in the Socratic dialog to increase understanding of basic math concepts.
4. Working on worksheets to prepare them for College Algebra concepts.

Competency 2: The student will reinforce concepts of College Algebra by:
1. Participating in group activities to discuss and share problem-solving techniques.
2. Explaining methods learned in College Algebra.
3. Using previously learned concepts to develop college algebra concepts.

Competency 3: The student will apply their knowledge of College Algebra to real-world applications by:
1. Recognizing how to apply College algebra concepts to the real world.
2. Working in group activities using college algebra concepts to solve real-world problems.
3. Using College Algebra in everyday situations.

Learning Outcomes:
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Use quantitative analytical skills to evaluate and process numerical data

Updated: Fall 2025