

CARIBBEAN SCHOOL OF THEOLOGY

Educating and training ministerial leadership



MTH212 Mathematics

Mission Statement

CST is committed to connect, serve, and train for Pentecostal ministry, leadership, and missions throughout the world.

Professor

Course Description

This course gives foundational concepts for the use of mathematics in solving everyday problems when some quantity is unknown. It addresses mathematical expressions and linear and nonlinear equations and inequalities. The course is divided into three units. Unit 1 deals with expressions and includes properties of numbers, dividing by zero, signed numbers, absolute value, exponents, polynomials, factoring, and functions. Unit 2 addresses linear equations and inequalities and gives applications of linear equations, graphing, and linear systems. Unit 3 addresses nonlinear expressions and equations and discusses rational expressions, radical expressions, quadratic equations, exponentials, and logarithms. There are no college-level prerequisites for the course. A scientific calculator is essential, specifically for the last lesson on exponentials and logarithms.

Resources

You will use College Algebra, an Independent-Study Textbook by Roger Sorbo, as both the textbook and study guide for the course.

Objectives

The key concepts presented in the lesson are derived from the objectives. Study each objective carefully as you begin each lesson. First, identify the key concepts presented in the objective, and second, identify what each objective is asking you to do with the key concepts. For example, in the objective, Assess the positive and negative ways that colonialism affected the spread of Christianity, the key concept is colonialism affected Christianity. In this objective you are asked to assess positive and negative ways—or show the good and bad effects colonialism had on the spread of Christianity.

Course Procedures

Classroom lectures, group discussion, audio-visual presentations, handouts, and case studies constitute some of the various methods that will be utilized in order to attain the course objectives.

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Course Introduction

Algebra is the method of solving practical problems by using symbols, usually letters, for unknown quantities. The word algebra probably comes from the Arabic word al-jabr meaning “restoring.” This is what you do when you solve an algebraic equation. You keep regrouping and combining, restoring, until you solve the equation. Algebra can be used almost daily to solve real-life problems. Moreover, algebra will sharpen your logic and deductive reasoning skills. It will help you to organize data and apply systematic effort to solve problems. These skills can be applied to many of life’s problems, not just mathematical ones. Doing mathematics and obtaining correct answers also teaches one discipline, perseverance, and exactness. These are valuable qualities to possess as you go through life.