MATHEMATICS

MAT 021. PRE-ALGEBRA.

This is a non-credit course designed to provide students, whose scores on the mathematics placement tests indicate a deficiency in arithmetic, the basic skills necessary to succeed in courses requiring computation. An emphasis is placed on problem-solving techniques and the application of arithmetic skills. It is also designed as a prerequisite for Math 022.

3 non-degree credits

MAT 022. BEGINNING ALGEBRA.

This is a non-credit course designed to provide the basic skills necessary to succeed in university-level mathematics and mathematic dependent course for students whose scores on the algebra section of the mathematics placement test indicate a deficiency. It introduces students to basic algebra concepts and teaches them to use these concepts in problem-solving.

4 non-degree credits

MAT 141. COLLEGE ALGEBRA.

Fundamental concepts of college algebra with preparation for calculus. The topic will include factoring, integer and rational exponents, simplifying algebraic expressions, solving equations and inequalities, the function notation, exponential and logarithmic function, graphs of functions and applications.

Prerequisite: Math 022 or placement test.
4 credits

MAT 142. COLLEGE TRIGONOMETRY.

Fundamental concepts of trigonometry and preparation for calculus. Topics will include angle measurement, the circular functions, and their graphs, laws of sines and cosines, solution of the triangle, solution of trigonometric equations, and inverse trigonometric functions, applications to vectors, and complex numbers.

Prerequisite: Mathematics 141.
4 credits

MAT 231. INTRODUCTION TO STATISTICS.

An introduction to statistics and statistical inference. Topics will include descriptive statistics, measures of central tendency and variability, probability theory, the binomial and normal distributions, correlation and linear regression, tests of hypotheses such as the t-test and the chi-square test, and the application and interpretation of statistical measures.

Prerequisite: Math 141.
4 credits

MAT 232. CALCULUS FOR BUSINESS AND SOCIAL SCIENCES.

A calculus course with emphasis on techniques, graphs, and applications rather than theory. Topics include functions; limits, continuity, and rates of change; the derivative; exponential and logarithmic functions; the define integral and functions of several variables.

Prerequisite: Math 141.
4 credits