MATHEMATICS (MATH)

MATH 099 College Math Preparation (4 credits)
The course covers the basic computations involved in working with whole numbers, fractions, decimal's, percent's, squares, and other topics.
Lab Required.

MATH 100 Applied Math (3 credits)
A study of basic mathematics, enabling the student to gain math proficiency required for vocational programs. Topics included are decimals, fractions, calculator use, and measurement.

MATH 101 Pre-Algebra (4 credits)
This course covers properties and operations of numbers, equations, computation with positive and negative numbers, and graphs.

MATH 102 Intermediate Algebra (4 credits)
Properties of the real number system, factoring, linear and quadratic equations, polynomial and rational expressions, inequalities, systems of equations, exponents, radicals, functional notation, rational equations and absolute value equations.

MATH 103 College Algebra (4 credits)
Relations and functions, equations and inequalities, complex numbers; polynomial rational, exponential and logarithmic functions and systems of equations. Graphing calculators are required.

MATH 104 Finite Mathematics (3 credits)
Systems of linear equations and inequalities, matrices, linear programming mathematics of finance, elementary probability, and descriptive statistics.
Prerequisite/s: MATH 102

MATH 105 Trigonometry (3 credits)
Angle measure trigonometric and inverse trigonometric functions, trigonometric identities and equations, parametric polar coordinates, and general application.
Prerequisite/s: MATH 102

MATH 107 Precalculus (5 credits)
Equations and inequalities, polynomial, rational, exponential, logarithmic, trigonometric and inverse trigonometric functions, trigonometric identities and equations and applications.
Prerequisite/s: MATH 102

MATH 129 Basic Linear Algebra (3 credits)
Systems of linear equations, row operations, echelon form, matrix operations, inverses determinants, vectors in Euclidean space, vector spaces, subspaces, homogeneous systems, linear independence, rank, and dimension.
Prerequisite/s: MATH 105, or MATH 107

MATH 146 Applied Calculus (3 credits)
Limits, derivatives, integrals, exponential and logarithmic functions, and applications. Graphing calculator required.
Prerequisite/s: MATH 103

MATH 165 Calculus I (4 credits)
Limits, continuity, differentiation, Mean Value Theorem, integration, Fundamental Theorem of Calculus, and applications.
Prerequisite/s: MATH 107, or MATH 105

MATH 166 Calculus II (4 credits)
Applications and techniques of integration, polar equations, parametric equations, sequences and series, power series and application.
Prerequisite/s: MATH 165

MATH 210 Elementary Statistics (3 credits)
An introduction to statistical methods of gathering, presenting and analyzing data. Topics include probability and probability distributions, confidence intervals, hypothesis testing, and linear regression and correlation.
Prerequisite/s: MATH 102

MATH 265 Calculus III (4 credits)
Multivariate and vector calculus including partial derivatives, multiple integration and its applications, line and surface integrals, Green's Theorem and Stoke's Theorem.
Prerequisite/s: MATH 166

MATH 266 Differential Equations (3 credits)
Solution of elementary differential equations by elementary techniques, Laplace transforms, systems of equations, matrix methods, numerical techniques and applications.
Prerequisite/s: MATH 265

MATH 314 Applied Statistics (3 credits)
A continuation of MATH 210 Elementary Statistics. Topics include normal distribution, z-scores, central limit theorem, estimation and confidence intervals, hypothesis testing, inferences about differences and chi-square distributions.
Prerequisite/s: MATH 103