

MATH – Mathematics

MATH 0097 - Math II

3.000 Credits

Prerequisites: MATH 0096 with a minimum grade of C or entrance math score in accordance with approved TCSG admission score levels

Emphasizes in-depth arithmetic skills needed for the study of mathematics and for the study of basic algebra. Topics include whole numbers, fractions, decimals, percents, ratio/proportion, measurement, geometry, and application problems.

MATH 0098 - Elementary Algebra

3.000 Credits

Prerequisites: MATH 0097 with a minimum grade of C or entrance math score in accordance with approved TCSG admission score levels

Emphasizes basic algebra skills. Topics include introduction to real numbers and algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, and polynomial factoring.

MATH 0099 - Intermediate Algebra

3.000 Credits

Prerequisites: MATH 0098 with a minimum grade of C or entrance math score in accordance with approved TCSG admission score levels

Emphasizes intermediate algebra skills. Topics include factoring, inequalities, rational expressions and equations, linear graphs, slope, and applications, systems of equations, radical expressions and equations, and quadratic equations.

MATH 1011 - Business Math

3.000 Credits

Prerequisites: MATH 0097 with a minimum grade of C or entrance math score in accordance with approved TCSG admission score levels

Emphasizes mathematical concepts found in business situations. Topics include basic mathematical skills, mathematical skills in business-related problem solving, mathematical information for documents, graphs, and mathematical problems.

MATH 1012 - Foundations of Mathematics

3.000 Credits

Prerequisites: MATH 0097 with a minimum grade of C or entrance math score in accordance with approved TCSG admission score levels

Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics.

MATH 1013

3.000 Credits

Prerequisites: MATH 0098 with a minimum grade of C or entrance math score in accordance with approved TCSG admission score levels

Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

MATH 1015

3.000 Credits

Prerequisites: MATH 1013 with a minimum grade of C

Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

MATH 1017

3.000 Credits

Prerequisites: MATH 1013 with a minimum grade of C
Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

MATH 1101 - Mathematical Modeling

3.000 Credits

Prerequisites: MATH 0099 with a minimum grade of C
or degree program admission level algebra competency

Emphasizes functions using real-world applications as models.

Topics include fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models; systems of equations; and optional topics in algebra.

MATH 1111 - College Algebra

3.000 Credits

Prerequisites: MATH 0099 with a minimum grade of C
or degree program admission level algebra competency

Emphasizes techniques of problem solving using algebraic

concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

MATH 1112 - College Trigonometry

3.000 Credits

Prerequisites: MATH 1111

Emphasizes techniques of problem solving using trigonometric concepts. Topics include trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions and graphing of trigonometric functions, logarithmic and exponential functions, and complex numbers.

MATH 1113 - Precalculus

3.000 Credits

Prerequisites: MATH 1111

Prepares students for calculus. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay.

MATH 1127 - Introduction to Statistics

3.000 Credits

Prerequisites: MATH 0099 with a minimum grade of C
or degree program admission level algebra competency

Emphasizes the concepts and methods fundamental to utilizing and interpreting commonly used statistics. Topics include descriptive statistics, basic probability, discrete and continuous distributions, sampling distributions, hypothesis testing chi square tests, and linear regression.

MATH 1131 - Calculus I

4.000 Credits

Prerequisites: Regular Status; MATH 1113 with a
minimum grade of C

Topics include the study of limits and continuity, derivatives, and integrals of functions of one variable. Applications are incorporated from a variety of disciplines. Algebraic, trigonometric, exponential, and logarithmic functions are studied.

MATH 1132 - Calculus II

4.000 Credits

Prerequisites: Regular Status; MATH 1131 with a
minimum grade of C

This course includes the study of techniques of integration, application of the definite integral, an introduction to differential equations, polar graphs, and power series.