MATHEMATICS (MATH)

MATH 0203, Applied Algebra Co-Req Support (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Provides foundational skills for students concurrently enrolled in Applied Algebra. As a co-requisite, this course enables students to complete both this course and Applied Algebra in the same semester
Corequisite(s): MATH 1203

MATH 0213, College Algebra Co-Req Support (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Provides foundational skills for students concurrently enrolled in College Algebra. As a co-requisite, this course enables students to complete both this course and College Algebra in the same semester.
Corequisite(s): MATH 1213

MATH 0313, Finite Math Co-Req Support (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Provides foundational skills for students concurrently enrolled in Finite Mathematics. As a co-requisite, this course enables students to complete both this course and Finite Mathematics in the same semester.
Corequisite(s): MATH 1313

MATH 1203, Applied Algebra (3 Credit Hours)
3 lecture hours per week, 3 contact hours per week
Emphasis on applications involving: solving equations and inequalities; function properties and graphs; linear, quadratic, polynomial, exponential and logarithmic functions. Credit will not be awarded for Applied Algebra and College Algebra.
Prerequisite(s): minimum score of 250 in 'ACCUPLACER NG Algebra QAS', minimum score of 19 in 'ACT Math', minimum score of 35 in 'Aleks Test', minimum score of 510 in 'MATH SECTION SCORE', MATH 0099, 1300 or 1500.

MATH 1213, College Algebra (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Provides in-depth treatment of solving equations and inequalities; function properties and graphs; inverse functions; linear, quadratic, polynomial, rational, exponential, and logarithmic functions with applications; systems of equations.
Prerequisite(s): minimum score of 21 in 'ACT Math', minimum score of 530 in 'SAT Mathematics', minimum score of 263 in 'ACCUPLACER NG Algebra QAS', minimum score of 46 in 'Aleks Test', MATH 0099, 1300, 1500, 0094 or 1313.

MATH 1223, Plane Trigonometry (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Covers trigonometric functions and identities, inverse trigonometric functions; fundamental identities and angle formulas; solving equations; triangles with applications; polar coordinate system.
Prerequisite(s): MATH 1213, 1100, minimum score of 26 in 'ACT Math', minimum score of 276 in 'ACCUPLACER NG Algebra QAS', minimum score of 610 in 'SAT Mathematics' or minimum score of 61 in 'Aleks Test'.

MATH 1313, Finite Mathematics (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Covers systems of linear equations, matrices, and matrix algebra; linear inequalities; counting techniques: permutations and combinations; probability; basic concepts in financial mathematics (annuities included). Includes an introduction to statistics
Prerequisite(s): minimum score of 19 in 'ACT Math', minimum score of 510 in 'SAT Mathematics', minimum score of 250 in 'ACCUPLACER NG Algebra QAS', minimum score of 35 in 'Aleks Test', MATH 0099, 1100, 1213, 1300, 1110, 1223 or 1203.

MATH 1413, Elementary Number Structure (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Covers basic concepts of fractions, decimals, percentage, geometry, computational facility, number theory, and problem solving.
Prerequisite(s): MATH 1213 or 1100.

MATH 1423, Geom for Elem & Mid Sch Tchrs (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Prepares the student to teach the geometry of the K-8 curriculum. Topics include basic concepts and properties of two and three-dimensional space; perimeter, area, volume, parallelism, perpendicularity, congruence, similarity, transformations and constructions.
Prerequisite(s): MATH 1213 or 1100.

MATH 2103, Calculus for Non-Sci Majors (3 Credit Hours)
3 lecture hours per week, 3 contact hours per week
Introduces differential and integral calculus, with an emphasis on applications – primarily for business, economics, and social sciences. Topics include limits, the first and second derivative, the first and second derivative tests for relative extrema; exponential and logarithmic functions; the definite and indefinite integral, and the Fundamental Theorem of Calculus. Calculus will be used to solve real world applications. (This course is not equivalent to Calculus I and does not serve as a prerequisite for Calculus II.)
Prerequisite(s): MATH 1213, 1100, minimum score of 26 in 'ACT Math', minimum score of 276 in 'ACCUPLACER NG Algebra QAS', minimum score of 610 in 'SAT Mathematics' or minimum score of 61 in 'Aleks Test'.

MATH 2115, Calculus I (5 Credit Hours)
5 lecture hours per week, 0 lab hours per week, 5 contact hours per week
Covers the following topics: limits and continuity of functions, introduction of the derivative; techniques of differentiation; Chain rule; implicit differentiation; differentiation of transcendental and inverse functions; applications of differentiation: concavity; relative extrema; maximum and minimum values of a function; optimization; anti-differentiation; definite integrals; Fundamental Theorem of Calculus; areas; applications of definitive integrals; work and volume.
Prerequisite(s): (MATH 1213 or 1100 and MATH 1223 or 1110) or minimum score of 28 in 'ACT Math', minimum score of 76 in 'Aleks Test' or minimum score of 660 in 'MATH SECTION SCORE'.

MATH 2125, Calculus II (5 Credit Hours)
5 lecture hours per week, 0 lab hours per week, 5 contact hours per week
Covers the following topics: techniques of integration, application of the integral, parametric equation, polar coordinates, sequences, and infinite series.
Prerequisite(s): MATH 2115 or 2100.

MATH 2303, Statistics I (3 Credit Hours)
3 lecture hours per week, 0 lab hours per week, 3 contact hours per week
Covers the following topics: descriptive statistics; probability; discrete and continuous (including the binomial, normal and T) distributions; sampling distributions; interval estimation; hypothesis testing; linear regression and correlation.
Prerequisite(s): MATH 1213, 1313, 1203, 1100, 1500, minimum score of 26 in 'ACT Math', minimum score of 276 in 'ACCUPLACER NG Algebra QAS', minimum score of 61 in 'Aleks Test' or minimum score of 610 in 'SAT Mathematics'.

MATH 2313, Statistics II (3 Credit Hours)
3 lecture hours per week, 3 contact hours per week
Reviews descriptive and inferential statistics and covers two-sample confidence intervals and hypothesis testing, correlation analysis, ANOVA, regression, and forecasting; and use of application software.
Prerequisite(s): MATH 2140 or 2303.