

MATHEMATICS (MATH)

MATH 0900 – Basic Mathematics 3 credit hours

Basic Mathematics is a review of basic mathematics skills, including the fundamental numerical operations of addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals. The course also covers ratio and proportion, percent, systems of measurement, and an introduction to algebra. This is a skills-improvement course that may not be used as credit for a certificate or degree. Satisfactory performance on a proficiency examination is required to receive credit for this course.

Schedule type: Lecture, Web

MATH 0980 – Foundations of Algebra I 4 credit hours

Lecture Hours: 4; Lab Hours: 0 This course is designed as a foundation of algebraic concepts for students with limited algebraic background, but who possess a foundation in arithmetic. The major topics include algebraic expressions, solving equations, solving inequalities, exponents, polynomials, graphs and equations of lines, functions and systems of linear equations.

Schedule type: Lecture, Web

MATH 0990 – Foundations of Algebra II 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This course covers algebra topics, including graphing lines, solving inequalities and systems of equations and inequalities, rational algebraic expressions, roots of numbers, radicals, rational and negative exponents, quadratic equations, complex numbers, and an introduction to functions. MATH 0990 is a skills improvement course that may not be used as credit for a certificate or degree. Satisfactory performance on a proficiency examination is required to receive credit for this course.

Pre-requisite(s): MATH 0980

Schedule type: Lecture, Web

MATH 1150 – Math for Technology 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This course includes topics in arithmetic, algebra, geometry, and trigonometry with applications to technology. This course may not be used to fulfill the mathematics general education requirement in associate degree or certificate of applied science programs.

Flat Fee: 45

Pre-requisite(s): MATH 0980, MATH 0990, MATH 1300, MATH 1299

Schedule type: Independent Study, Lecture, Web

MATH 1190 – Math for Allied Health 3 credit hours

Lecture Hours: 3; Lab Hours: 0 Students in this course study applications of mathematics related to allied health. Topics include the metric system, with a focus on unit conversions by proportionalities, as well as dimensional analysis, dosage calculations, representations of linear functions verbally, graphically, numerically and algebraically. It also includes medication calculations and drip rates.

Schedule type: Independent Study, Lecture, Web

MATH 1198 – Survey of Mathematical Concepts Lab 3 credit hours

Survey of Mathematical Concepts Lab will cover topics to reinforce foundational concepts, such as problem solving, applications in problem solving, selected branches of mathematics including sets, logic, probability and statistics with examples and problems in each. Survey of Mathematical Concepts Lab is required for students who do not have sufficient test scores to be placed into MATH 1200. MATH 1198 is a co-requisite for MATH 1200.

Schedule type: Lecture, Online, Web

MATH 1199 – Surv of Math Conc w/Support 4 credit hours

Lecture Hours: 4; Lab Hours: 0 This course is a survey of selected branches of mathematics, including sets, logic, probability, and statistics, with examples and problems in each.

Pre-requisite(s): MATH 0980

Schedule type: Lecture, Web

MATH 1200 – Survey of Mathematical Concept 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This course is a survey of selected branches of mathematics including sets, logic, probability, and statistics, with examples and problems in each.

Flat Fee: 45

Pre-requisite(s): MATH 0980

Schedule type: Independent Study, Lecture, Web

MATH 1201 – Applied Algebra Lab 3 credit hours

Applied Algebra Lab will cover topics to reinforce foundational concepts, such as solving linear equations and inequalities including absolute values, solving quadratic equations with complex numbers, solving systems of equations, graphing functions including linear and quadratic, values of exponential and logarithmic functions. Applied Algebra Lab is required for students who do not have sufficient test scores to be placed into MATH 1203. MATH 1201 is a co-requisite for MATH 1203.

Co-requisite(s): MATH 1203

Schedule type: Lecture, Online, Web

MATH 1202 – Applied Algebra w/Support 4 credit hours

Lecture Hours: 4; Lab Hours: 0 This course covers solving linear equations and inequalities, including absolute values, solving quadratic equations with complex numbers, solving systems of equations, graphing functions, including linear and quadratic, values of exponential and logarithmic functions.

Pre-requisite(s): MATH 0980

Schedule type: Lecture, Web

MATH 1203 – Applied Algebra 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This course covers solving linear equations and inequalities, including absolute values, solving quadratic equations with complex numbers, solving systems of equations, graphing functions including linear and quadratic, values of exponential and logarithmic functions.

Flat Fee: 45

Pre-requisite(s): MATH 0990

Co-requisite(s): MATH 1201

Schedule type: Independent Study, Lecture, Web

MATH 1298 – College Algebra Lab 3 credit hours

College Algebra Lab will cover topics to reinforce foundational concepts, such as solving linear equations and inequalities, simplifying quadratic, polynomial, rational, exponential and logarithmic expressions, complex numbers and solving quadratic, polynomial, rational, exponential and logarithmic equations. College Algebra Lab is required for students who do not have sufficient test scores to be placed into MATH 1300. MATH 1298 is a co-requisite for MATH 1300.

Co-requisite(s): MATH 1300

Schedule type: Lecture, Online, Web

MATH 1299 – Coll. Algebra w/ Support 4 credit hours

Lecture Hours: 4; Lab Hours: 0 College Algebra covers topics in algebra including solving and graphing equations and inequalities and working with functions, including quadratic, polynomial, rational, exponential, and logarithmic functions. It also covers complex numbers as roots for quadratic equations.

Pre-requisite(s): MATH 0980

Schedule type: Lecture, Web

MATH 1300 – College Algebra 3 credit hours

Lecture Hours: 3; Lab Hours: 0 College Algebra covers topics in algebra, including solving and graphing equations and inequalities and working with functions, such as quadratic, polynomial, rational, exponential, and logarithmic functions. It also covers complex numbers as roots for quadratic equations.

Flat Fee: 45

Pre-requisite(s): MATH 0990

Co-requisite(s): MATH 1298

Schedule type: Independent Study, Lecture, Web

MATH 1400 – College Trigonometry 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This course is a study of trigonometric functions, identities, and equations. It also covers angle measure, graphing of trigonometric functions, inverse functions, polar coordinates, limits, and continuity. This is a course for students who plan to study Calculus.

Flat Fee: 45

Pre-requisite(s): MATH 1300, MATH 1299

Schedule type: Independent Study, Lecture, Web

MATH 1600 – Elementary Number Structures 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This course covers topics that prepare teachers in elementary education. Topics include logic, sets, numeration systems, elementary number theory, rational numbers, and real numbers. This course may not be used to fulfill the mathematics general education requirement in associate degree or certificate of applied science programs.

Flat Fee: 45

Pre-requisite(s): MATH 1300, MATH 1299

Schedule type: Independent Study, Lecture, Web

MATH 1630 – Elem Geometry & Statistics 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This course covers topics in Euclidean geometry, the coordinate plane, and probability and statistics. It is designed to provide students with an understanding of the nature of mathematics.

Pre-requisite(s): MATH 1300, MATH 1299

Schedule type: Independent Study, Lecture, Web

MATH 1700 – Finite Math 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This course is an overview of some or all of the following topics: systems of linear equations, vectors, matrices, and matrix algebra; it may also cover linear inequalities, counting techniques, including permutations and combinations probability, as well as basic concepts in mathematics finance (annuities included), and an introduction to statistics.

Pre-requisite(s): MATH 0990

Schedule type: Independent Study, Lecture, Web

MATH 2000 – Statistics 3 credit hours

Lecture Hours: 3; Lab Hours: 0 This introduction to the study of probability and statistics emphasizes the relationship between them. Topics covered include discrete random variables, distributions (including the Binomial Distribution), sampling theory, testing of hypotheses, regression, correlation, and analysis of variance. The course gives special attention to decision-making and problem-solving related to business and experimentation.

Flat Fee: 45

Pre-requisite(s): MATH 1300, MATH 1299, MATH 1203, MATH 1202

Schedule type: Independent Study, Lecture, Web

MATH 2010 – Calculus I 5 credit hours

Lecture Hours: 5; Lab Hours: 0 This course covers the limits and continuity of functions, an introduction of derivatives, techniques of differentiation, Chain rule, implicit differentiation, differentiation of transcendental and inverse functions, and applications of differentiation: concavity; relative extrema. It also covers maximum and minimum values of a function, optimization, anti-differentiation, definite integrals, as well as Fundamental Theorem of Calculus, applications of definite integrals, and work and volume.

Pre-requisite(s): MATH 1400, MATH 1299, MATH 1300

Schedule type: Independent Study, Lecture, Web

MATH 2100 – Calculus II 5 credit hours

Lecture Hours: 5; Lab Hours: 0 This course covers definite integrals, transcendental functions, and applications of derivatives and integrals.

Pre-requisite(s): MATH 2010

Schedule type: Independent Study, Lecture, Web