

MATHEMATICS (MTH) SOLANO CAMPUS

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MTH Courses

MTH 999L College Algebra and Trigonometry Support Laboratory (1 unit)

Term Typically Offered: F, SP

CR/NC

Corequisite: MTH 100 or MTH 1100.

Offered at Solano Campus. Support for college algebra and trigonometry. Content will include just-in-time skill development needed for topics college algebra and trigonometry as well as focused support for the learning of topics in college algebra and trigonometry. 1 laboratory. Formerly MTH 99L at Cal Maritime.

MTH 1100 College Algebra and Trigonometry (4 units)

Term Typically Offered: F, SP

2026-28 or later catalog: GE Area 2

2020-26 catalogs: GE Area B4

Offered at Solano Campus. Polynomial, rational, logarithmic, exponential, and trigonometric functions and their inverses, with graphical representation of all of the above. Additional topics include systems of equations, introductory matrix algebra, and vectors in the plane. 4 lectures. Fulfills GE Area 2 with a grade of C- or better (GE Area B4 for students on the 2020-26 catalogs). Formerly MTH 100 at Cal Maritime.

MTH 1101 College Algebra (3 units)

Term Typically Offered: F, SP

Offered at Solano Campus. Exponents, factoring, linear and quadratic equations, absolute value, inequalities, functions, graphing, polynomial and rational functions, exponential and logarithmic functions, systems of equations, with graphical representations 3 lectures. Formerly MTH 101 at Cal Maritime.

MTH 1105 Finite Mathematics for Business (3 units)

Term Typically Offered: TBD

2026-28 or later catalog: GE Area 2

2020-26 catalogs: GE Area B4

Prerequisite: MTH 100 or MTH 1100 with a grade of C- or better; or MTH 101 or MTH 1101 with a grade of C- or better.

Offered at Solano Campus. Introduction to mathematical concepts in business and finance, including linear systems of equations and inequalities, linear programming, sets, counting and probability. 3 lectures. Fulfills GE Area 2 with a grade of C- or better (GE Area B4 for students on the 2020-26 catalogs). Formerly MTH 105 at Cal Maritime.

MTH 1107 Elementary Statistics (3 units)

Term Typically Offered: F, SP

2026-28 or later catalog: GE Area 2

2020-26 catalogs: GE Area B4

Prerequisite: MTH 100 or MTH 1100 with a grade of C- or better; or MTH 101 or MTH 1101 with a grade of C- or better.

Offered at Solano Campus. Introduction to general concepts in statistics, including descriptive methods, graphical representations of data, sampling, distributions, statistical inference, confidence intervals, hypothesis tests, correlation and basic probability. Technology will be used extensively to describe and analyze data. 3 lectures. Fulfills GE Area 2 with a grade of C- or better (GE Area B4 for students on the 2020-26 catalogs). Formerly MTH 107 at Cal Maritime.

MTH 2205 Calculus for Business (3 units)

Term Typically Offered: TBD

2026-28 or later catalog: GE Area 2

2020-26 catalogs: GE Area B4

Prerequisite: MTH 100 or MTH 1100 with a grade of C- or better.

Offered at Solano Campus. Focuses on basics of calculus and the application to business decision-making and problem solving. Concentrate on formulae that will be performed on Excel later in the curriculum. Math theory and math models. Exercises in critical thinking and model building will be introduced, along with the application of these two tools to the quantitative analysis of business problems. 3 lectures. Fulfills GE Area 2 with a grade of C- or better (GE Area B4 for students on the 2020-26 catalogs). Formerly MTH 205 at Cal Maritime.

MTH 2210 Calculus I (4 units)

Term Typically Offered: F, SP

2026-28 or later catalog: GE Area 2

2020-26 catalogs: GE Area B4

Prerequisite: MTH 100 or MTH 1100 with a grade of C- or better.

Offered at Solano Campus. Introduction of functions and limits, differentiation, applications of differentiation, integration, and applications of the definite integral. 4 lectures. Fulfills GE Area 2 with a grade of C- or better (GE Area B4 for students on the 2020-26 catalogs). Formerly MTH 210 at Cal Maritime.

MTH 2211 Calculus II (4 units)

Term Typically Offered: F, SP

2026-28 or later catalog: GE Area 2

2020-26 catalogs: GE Area B4

Prerequisite: MTH 210 or MTH 2210 with a grade of C- or better.

Offered at Solano Campus. An introduction to additional methods of integration and improper integrals. Presented are trigonometric and hyperbolic functions and their inverses; infinite sequences and series; and a brief introduction to linear, ordinary first, and second-order differential equations. 4 lectures. Fulfills GE Area 2 with a grade of C- or better (GE Area B4 for students on the 2020-26 catalogs). Formerly MTH 211 at Cal Maritime.

MTH 2212 Calculus III (4 units)

Term Typically Offered: F

2026-28 or later catalog: GE Area 2

2020-26 catalogs: GE Area B4

Prerequisite: MTH 211 or MTH 2211 with a grade of C- or better.

Offered at Solano Campus. Introduction to the algebra and calculus of vectors. Functions of several variables and partial differentiation, as well as multiple integration and vector analysis. 4 lectures. Fulfills GE Area 2 with a grade of C- or better (GE Area B4 for students on the 2020-26 catalogs). Formerly MTH 212 at Cal Maritime.

MTH 2215 Differential Equations (3 units)

Term Typically Offered: SP

2026-28 or later catalog: GE Area 2

2020-26 catalogs: GE Area B4

Prerequisite: MTH 211 or MTH 2211 with a grade of C- or better.

Offered at Solano Campus. First and second-order differential equations with constant coefficients. Higher order linear differential equations. Linear systems and eigenvector methods. Emphasis on engineering applications. 3 lectures. Fulfills GE Area 2 with a grade of C- or better (GE Area B4 for students on the 2020-26 catalogs). Formerly MTH 215 at Cal Maritime.

MTH 2250 Introduction to Linear Algebra (3 units)

Term Typically Offered: F

Prerequisite: MTH 211 or MTH 2211 with a grade of C- or better.

Offered at Solano Campus. Theory and applications of linearity, including vectors, matrices, systems of linear equations, dot and cross products, determinants, linear transformations in Euclidean space, linear independence, bases, eigenvalues, eigenvectors, and diagonalization. 3 lectures. Formerly MTH 250 at Cal Maritime.

MTH 3320 Probability and Statistics (3 units)

Term Typically Offered: F

Prerequisite: One of the following: MTH 212, MTH 2212, MTH 215, or MTH 2215; and MTH 250 or MTH 2250.

Offered at Solano Campus. Introduction to probability and its application in statistics. Foundations of probability, discrete and continuous random variables, conditional probability, special distributions such as the uniform, exponential and normal distributions, joint distributions, limit theorems, statistical inference both frequentist and Bayesian, and random processes. 3 lectures. Formerly MTH 320 at Cal Maritime.

MTH 3380 Introduction to Mathematical Modeling (3 units)

Term Typically Offered: F

Prerequisite: One of the following: MTH 212, MTH 2212, MTH 215, or MTH 2215; and MTH 250 or MTH 2250.

Offered at Solano Campus. Introduction to the formulation and analysis of mathematical models. Discrete, continuous, and stochastic modeling frameworks. Emphasis will be problem-driven (as opposed to method-driven) applications of mathematics with a focus on the design and analysis of models using both analytical and computational simulation approaches. 3 lectures. Formerly MTH 380 at Cal Maritime.

MTH 3390 Independent Study (1-3 units)

Term Typically Offered: TBD

Prerequisite: Consent of the department.

Offered at Solano Campus. Substantial study above and beyond the regular offerings in the Academy catalog. Arrangement needed with an Academy faculty member to be the Independent Study Advisor. Approved application for Independent Study must be on file. Formerly MTH 390 at Cal Maritime.

MTH 3395 Special Topics (1-3 units)

Term Typically Offered: SP

Prerequisite: Consent of instructor.

Offered at Solano Campus. Special topic courses are intended to enable each department to offer an elective course of study when faculty scholarship activities, the expertise of visiting faculty, or off-campus educational programs may afford a unique and worthwhile learning experience. 1 to 3 lectures. Formerly MTH 395 at Cal Maritime.