

MA HEMA IC

78

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79

Kappa Mu Epsilon, honor society in mathematics, selects students who have achieved standards of scholarship, professional merit, and academic distinction. A student must have completed 3 semesters' rank in the upper 35%, completed 3 courses in MAT, to include calculus, and have a minimum 3.0 Math GPA. is a national honorary science society for those who have completed 15 hours in natural science and math with a minimum GPA of 3.0 in these courses.

() Hours Credit; F–Fall, W–Winter; S–Spring; Su–Summer

This course is designed to introduce the student to problem solving strategies and the real number system. Topics will include the whole numbers, integers, fractions and decimals, functions and coordinate geometry.

This course is designed to introduce the student to the basic concepts of several areas of mathematics. Topics of focus will include counting techniques, descriptive statistics, probability and geometry.

Prerequisite: Two years of high school algebra.

Topics include equations in two variables, functions, graphing techniques, systems of equations and inequalities, exponential and logarithmic functions, matrices, and the theory of polynomial equations.

Prerequisite: MAT 111.

Topics include the definition of the trigonometric functions, radian measure, linear and angular velocity, graphing techniques, trigonometric identities and equations, the inverse trigonometric functions, and solving triangles.

Prerequisite: Two years of high school algebra.

Descriptive statistics with introduction to inferential statistics. Topics include organization of data into frequency distribution tables and histograms, measures of central tendency, standard deviation, basic probability, continuous distributions through the normal distribution, introduction to sampling theory and hypothesis testing.

Prerequisites: Two years of high school algebra and one of geometry.

An introduction to polynomial, exponential, logarithmic, and trigonometric functions and basic analytic geometry. This course is intended for students planning to take MAT 211 and is not recommended for students who have taken MAT 111 and/or 112. Prerequisite: MAT 111 or its equivalent.

Topics include a review of algebra principles, development of differential calculus with an emphasis on applications of the derivative to business and biological sciences, and an introduction to integral calculus with elementary applications of the definite integral. Is not recommended for students that have taken MAT 211-12.

Prerequisite: MAT 111 or its equivalent.

Topics include elementary logic, sets, proof techniques including induction, relations and graphs, recurrence relations, basic counting techniques, equivalence relations, Boolean algebra, and algebraic structures.

Corequisite: MAT 212

An introduction to abstract mathematical reasoning, including reading and writing proofs. Topics include logic, types of proofs, set theory, functions and relations.

Prerequisite: MAT 201 or 211.

This is a calculus-based statistics course. Topics include descriptive statistics, probability theory, discrete and continuous random variables, common discrete distributions, the normal distribution, sampling distributions, and applications to confidence interval estimates and hypothesis testing.

Prerequisite: Pass Calculus Readiness Test or MAT 116.

Topics include basic concepts of plane analytic geometry, functions, limits, differentiation of algebraic and trigonometric functions, applications of the derivative, the indefinite and the definite integral, and the fundamental theorem of calculus.

Prerequisite: MAT 211.

Topics include integration by substitution, numeral integration, applications of the definite integral, the calculus of transcendental functions, techniques of integration, and the calculus of parametrized curves. Prerequisite: MAT 208.