Courses in Mathematics

A Mat 101
Algebra and Calculus I (3)
An integrated approach to precalculus and calculus. Elements of algebra and analytic geometry necessary to study calculus of one variable. Functions, limits, continuity, differentiation of algebraic functions, applications of differentiation. May not be taken for credit by students with credit for A Mat 100, 106, 112 or 118. Prerequisite(s): three years of high school mathematics or permission of the department.
(1814) Wauchope, John
6 Week 2: June 20-July 29
MTWThF 11:00a.m.-12:20p.m.
ES-139

A Mat 106
Survey of Calculus (3)
This course offered online through the Blackboard Learning System. An intuitive approach to differentiation and integration of algebraic and transcendental functions, intended only for students who plan to take no more calculus. Does not yield credit toward the major or minor in mathematics. May not be taken for credit by students with credit for A Mat 111, 112 or 118. Prerequisite(s): A Mat 100 or satisfactory performance on the mathematics placement exam.
(2087) Goldfarb, Boris
4 Week 1: May 23-June 17
Online course in Blackboard
(2413) Goldfarb, Boris
4 Week 3: July 18-August 12
Online course in Blackboard

A Mat 108
Elementary Statistics (3)
Frequency distributions, measures of central tendency and dispersion, probability and sampling, estimation, testing of hypotheses, linear regression and correlation. Prerequisite(s): three years of high school mathematics. Only one of A Mat 108 and B Itm 220 may be taken for credit.
(1060) Martin, Logan
6 Week 1: May 23-July 1
MTWThF 2:00p.m.-3:20p.m.
ES-139
The sections below offered online through the Blackboard Learning System.
(1829) Reinhold-Larsson, Karin
4 Week 3: July 18-August 12
Online course in Blackboard
(2088) Reinhold-Larsson, Karin
4 Week 3: July 18-August 12
Online course in Blackboard

A Mat 112
Calculus I (4)
Calculus of one variable. Limits, continuity, differentiation of algebraic functions, applications of differentiation, antiderivatives, the definite integral, transcendental functions. Prerequisite(s): A Mat 100 or satisfactory performance on the mathematics placement exam.
(1007) Tran, Mai
6 Week 1: May 23-July 1
A Mat 113
Calculus II (4)
Techniques of integration, applications of the definite integral, conics, polar coordinates, improper integrals, infinite series. Prerequisite(s): A Mat 111 or 112.

(1403) Clark, James
6 Week 1: May 23-July 1
MTWThF 12:00p.m.-1:45p.m.
ES-140

(1347) Cahill, Patrick
6 Week 3: July 5-August 12
MTWThF 10:00a.m.-11:45a.m.
ES-140

A Mat 214
Calculus of Several Variables (4)
Curves and vectors in the plane, geometry of three-dimensional space, vector functions in three-space, partial derivatives, multiple integrals, line and surface integrals. Prerequisite(s): A Mat 113 or 119.

(1239) Sidoli, Scott
6 Week 3: July 5-August 12
MTWThF 12:00p.m.-1:45p.m.
ES-140

A Mat 220
Linear Algebra (3)
Linear equations, matrices, determinants, finite dimensional vector spaces, linear transformations Euclidean spaces. Prerequisite(s): A Mat 113 or 119.

(1348) Srivastav, Anupam
4 Week 1: May 23-June 17
MTWThF 9:30a.m.-11:50a.m.
ES-147

The section below offered online through the Blackboard Learning System.

(1855) Zhu, Kehe
4 Week 1: May 23-June 17
Online course in Blackboard

A Mat 311
Ordinary Differential Equations (3)
Linear differential equations, systems of differential equations, series solutions, boundary value problems, existence theorems, applications to the sciences. Prerequisite(s): A Mat 214.

(1658) Tambroni, John
4 Week 1: May 23-June 17
MTWThF 1:00p.m.-3:20p.m.
ES-146

A Mat 326
Classical Algebra (3)
This course offered online through the Blackboard Learning System. Elementary number theory. Elementary theory of equations over rational, real, and complex fields. A Mat 326Z is the writing intensive version of A Mat 326; only one may be taken for credit. Prerequisite(s): A Mat 113 or 119.

(1264) Childs, Lindsay
6 Week 3: July 5-August 12
Online course in Blackboard
A Mat 362
Probability for Statistics (3)
Introduction to discrete and continuous probability models, including probability mass functions, density functions and cumulative distribution functions. Discrete examples will include the binomial, negative binomial, Poisson, and hypergeometric distributions. Continuous distributions will include the normal and exponential distributions, the family of gamma and beta densities, and, if time permits, t and chi-square distributions. Other topics are the probability axioms, equally likely sample spaces (combinatorics), conditional probability, joint distributions, marginal distributions, conditional distributions, covariance, correlation, moment generating functions and the Central Limit Theorem. A Mat 362 constitutes substantial preparation for Actuarial Exam P. A student may not apply both A Mat 362 and A Mat 367 towards a major or minor in mathematics or a minor in statistics. Prerequisite(s): Calculus through A Mat 214 or the equivalent.

(1295) Racquet, John
4 Week 1: May 23-June 17
MTWThF 9:30a.m.-11:50a.m.
ES-143

A Mat 363
Statistics (3)
A calculus-based introduction to statistics. Confidence intervals and hypothesis tests for means and variances, differences of means and ratios of variances, including P-values, power functions and sample size estimates and involving normal, binomial, t, chi-square, and F distributions. Additional topics may include introductions to simple linear regression, Bayesian statistics, sample survey methods, goodness of fit tests, non-parametric tests, or analysis of variance. Only one version of A Mat 363 may be taken for credit. Students with credit for A Mat 367 but who have not taken A Mat 362 may take A Mat 363 only with permission of instructor. Students with credit for A Mat 368 may not take A Mat 363. Prerequisite(s): A Mat 362.

(1345) Stessin, Michael
4 Week 2: June 20-July 15
MTWThF 9:00a.m.-11:20a.m.
ES-143

A Mat 367
Discrete Probability (3)
Introduction to discrete probability models (including the binomial, negative binomial, Poisson, and hypergeometric distributions, their means, variances and cumulative distribution functions). Other topics include probability axioms, equally likely sample spaces (combinatorics), conditional probability, the gamblers' ruin problem, finite state Markov chains, moment generating functions, joint distributions (including the multinomial distribution), marginal distributions, conditional distributions, covariance and correlation, the weak law of large numbers, and, if time permits, the Central Limit Theorem. Students who intend to take A MAT 363 should take A MAT 362, or A Mat 367. Students who have taken A MAT 367 and who wish to take a first statistics course can take A MAT 308. Actuarial students, who need continuous as well as discrete probability, should take A MAT 362 (which constitutes substantial preparation for Actuarial Exam P). A student may not apply both A MAT 362 and A MAT 367 toward any major of minor in mathematics or a minor in statistics. A MAT 367Z is the writing intensive version of A MAT 367; only one may be taken for credit. Prerequisite(s): A MAT 113 or 119 plus 6 credits at the 200 level or above in either mathematics or computer science.

(1692) Plotnik, Steven
4 Week 1: May 23-June 17
MTWThF 9:30a.m.-11:50a.m.
ED-146