

IQL QUANTITATIVE LITERACY (IQL)

IQL-101 Quantitative Literacy (4 Credits)

Students will develop the skills and habits of mind needed to work with quantitative information in daily life - numbers in the news, taxes, debt, inflation, probability. Emphasizes real-world, open-ended situations. Topics include estimation, algebraic reasoning, linear and exponential models, descriptive statistics, and spreadsheets.

MATH-111 Applied College Algebra (4 Credits)

Algebra and trigonometry taught in context, using technology to enhance understanding of algebraic concepts. Topics include numeracy; data analysis; linear, quadratic, and exponential growth; formula use; laws of exponents; logarithms; and systems of equations. Not open to students who have completed MATH-112 or MATH-211.

Offered: All, Every Year

MATH-112 Precalculus (4 Credits)

Functions explored from numerical, graphical, and analytic perspectives. Function notation, operations, and inverses. Includes study of polynomial, rational, exponential, logarithmic, and trigonometric functions. Intended as a preparation for calculus and not open to students who have taken calculus in college. Presumes competency in the content of MATH-111.

Offered: All, Every Year

MATH-135 Discrete Math for Computer Science (4 Credits)

This course introduces the foundations of discrete mathematics as they apply to computer science. The topics covered include binary and hexadecimal number systems, sets, logic and truth tables, functions and relations, combinations and permutations, recurrence relations, Boolean algebra, graph theory, matrix operations, and induction.

Offered: Fall, Every Year

MATH-141 Introductory Statistics (4 Credits)

Basic tools of descriptive statistics, discrete probability, binomial distribution, normal distribution, t-distribution, estimates and sample sizes, hypothesis testing, elementary correlation and regression, contingency tables. Use of graphing calculator and spreadsheet software.

Offered: All, Every Year

MATH-172 Math for Prek-6 Educators II (4 Credits)

Considers applications of rational numbers, percent, probability and statistics, counting techniques, geometry, and measurement. Intended for prospective elementary school teachers. Utilizes appropriate grade-level technology.

Prerequisite(s): Grade C or higher in MATH-171

Offered: All, Every Year

MATH-211 Calculus I (4 Credits)

Topics include limits, continuity, derivatives, and integrals of functions of one variable, and the Fundamental Theorem of Calculus. Applications of differentiation and development of mathematical modeling skills will be emphasized. Technology used where appropriate. Presumes competency in content of MATH-112.

Offered: All, Every Year

MGT-140 Quantitative Decision-Making (4 Credits)

An introduction to quantitative analysis for management to provide students with an opportunity to learn the basic concepts and the quantitative/analytical tools used in the process of decision-making and problem-solving.

Prerequisite(s): Any College MATH course, passing grade on the Math Assessment Exam, and PSYC-251 SOC-303 or IQL-101

Offered: All, Every Year

PSYC-251 Psychological Statistics (4 Credits)

An introduction to descriptive and inferential statistics used in psychological research. Topics include measures of central tendency, variability, and correlation, as well as probability, sampling, hypothesis testing, including analysis of variance.

Offered: All, Every Year