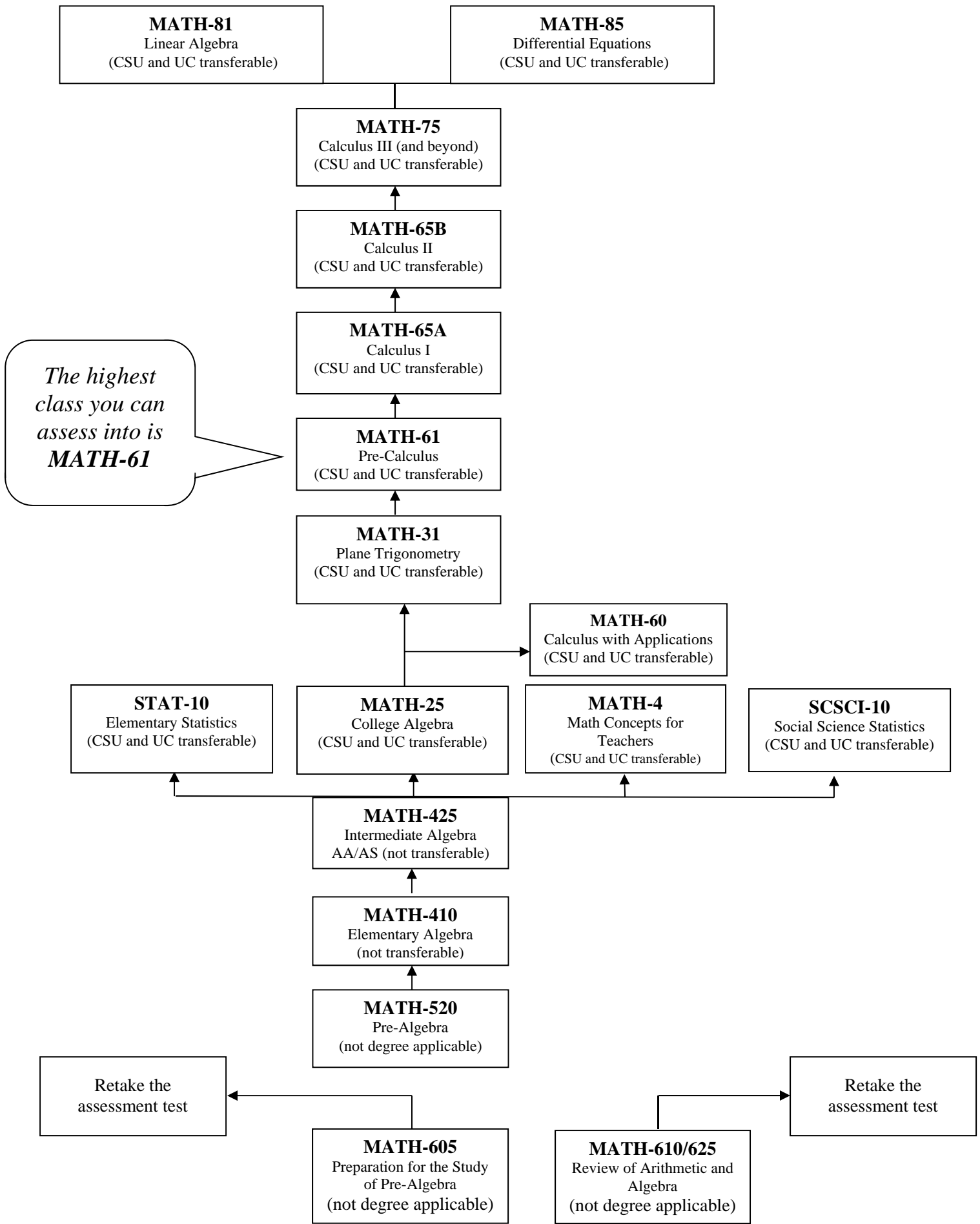


MATHEMATICS COURSE SEQUENCE



MATH-605 Preparation for the Study of Pre-Algebra

Prerequisite: Eligibility as determined by the Chaffey College Assessment Process

0 Units

Mathematics review for students whose assessment results indicate placement below Arithmetic/Pre-Algebra, and who wish to re-acquire the skills needed to re-assess into a higher level mathematics course. The course focuses on operations of whole numbers, rational numbers, decimal numbers, and integers. Other topics include; ratios, proportions, and measurements. Successful completion of this course allows the student to bypass the 3-month waiting period for re-assessment.

MATH-610/625 Preparation of the Study of Algebra/ College Algebra**0 Units**

Mathematics review for students who wish to re-acquire the skills needed to re-assess into a higher level mathematics course.

MATH-520 Arithmetic and Preparation for Algebra**4 Units**

Prerequisite: Eligibility as determined by the Chaffey College Assessment Process

For students preparing for elementary algebra. Topics include rational number arithmetic, order of operations, Pythagorean Theorem, variable expressions, solving linear equations, application problems, graphing, linear equations, and polynomial operations.

MATH-410 Elementary Algebra**4 Units**

Prerequisite: Eligibility as determined by the Chaffey College Assessment Process or successful completion of MATH-520

Fundamental algebraic operations of addition, subtraction, multiplication, and division. Special products and factoring, rational expressions and their operations, solution and application of linear and rational equations, graphing of linear equations in two variables, introduction to functions and linear systems of two equations determining the equation of line.

MATH-425 Intermediate Algebra**4 Units**

Prerequisite: Eligibility as determined by the Chaffey College Assessment Process or successful completion of MATH-410

Review and extension of the concepts from Elementary Algebra. Content includes polynomials, radical, absolute value, exponential and logarithmic expressions, equations and functions; linear and non-linear systems of equations and inequalities; quadratic equations; graphing of nonlinear functions; complex numbers; nonlinear single-variable inequalities, conic sections; sequences; series and the Binomial Theorem.

MATH-25 College Algebra**4 Units**

Prerequisite: Eligibility as determined by the Chaffey College Assessment Process or successful completion of MATH-425 or equivalent with a minimum grade of C

Coordinate geometry and graphing techniques; conic sections; solutions to higher degree polynomial equations; functions; polynomial, rational, inverse, exponential and logarithmic functions; systems of nonlinear equations and inequalities; matrices and determinants; sequences and series; binomial expansion; mathematical induction; introduction to mathematical proof.

Transfer credit: CSU; UC credit limitations

MATH-31 Plane Trigonometry**4 Units**

Prerequisite: MATH-25 or equivalent with a minimum grade of C

Trigonometric functions including definitions of the circular functions; radian measure, graphs, inverse trigonometric functions, trigonometric equations and identities, solution of right and oblique triangles, applications, vectors, complex numbers, polar coordinates and graphs, equation of conics, and rotation of axes.

Transfer credit: CSU

MATH-61 Pre-Calculus**4 Units**

Prerequisite: MATH-25 and 31 or equivalent with a minimum grade of C

Further studies in algebra and trigonometry for students intending to take calculus. Factoring techniques, nonlinear inequalities including absolute values, partial fractions, introduction of limits, graphing rational functions, conic sections, and trigonometric functions and inverses. Trigonometric concepts emphasized as needed for calculus, including identities, equations, and applications.

Transfer credit: CSU; UC credit limitations