MATHEMATICS (MATH)

Accelerated Math (AMATH)

AMATH 097 Corequisite Intermediate Algebra 7 Credits
Introduces the study of linear equations and systems, properties of exponents, operations on polynomials, factoring, and quadratic equations with additional support with algebra techniques. Students should take this course if they plan to pursue a pathway that requires MATH 141 (STEM) or MATH 147 (Business) or if they plan to transfer to a university that requires MATH 097 for admission.
Prerequisite: Prerequisite: Qualifying placement for MATH 092 or ABE 065 or an S in ABE 064.

AMATH 141 Corequisite Precalculus I 8 Credits
Covers power, exponential, and logarithmic functions and analytic geometry with additional support with algebra techniques. Students who plan to pursue Science, Engineering, or Math (SEM) pathways should take this course.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 097 or equivalent.

Mathematics (CMATH)

CMATH 107 Clippers Math In Society 5 Credits
Gives students the opportunity to complete MATH& 107 in one quarter with prerequisite support as needed. Explores a variety of mathematical topics presenting mathematics as an art and as a tool for understanding the world around us. Designed for non-science majors. Specific topics may be drawn from geometry, number theory, set theory, and the history of mathematics. Students will earn credit for either MATH 095 or MATH& 107 at the conclusion of the course.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 092 or an S in ABE 065.

CMATH 146 Clippers Introduction to Statistics 7 Credits
Gives students the opportunity to complete MATH& 146 in one quarter with prerequisite support, as needed. Covers basic probability and descriptive and inferential statistics. Students will earn credit for either MATH 095 and MATH 096 or MATH 096 and MATH& 146 at the conclusion of the course.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 092 or an S in ABE 065.

Mathematics (MATH)

MATH 092 Mathematical Reasoning 5 Credits
Introduces operations with rational numbers, applications, problem solving skills, expressions, solving linear equations, and graphing linear relationships.
Prerequisite: Prerequisite: Qualifying placement for MATH 092 or ABE 065 or an S in ABE 064.

MATH 093 Algebra Support for Intermediate Algebra 2 Credits
Strengthens algebraic foundations for order operations, dimensional analysis, linear equations, and graphing.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 097 or equivalent.

MATH 095 Intermediate Algebra Essentials 5 Credits
Introduces the study of linear equations and polynomials, systems of linear equations, properties of positive exponents, operations on polynomials, basic factoring, and analyzing graphs of linear, quadratic, and exponential functions. Students should take this course if they plan to pursue a pathway that requires MATH& 146 or MATH& 107.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 092 or an S in ABE 065.

MATH 096 Applied Algebra Topics 2 Credits
Provides algebraic foundations by introducing the vocabulary, problem solving strategies, critical thinking, mathematical concepts, and technical skills needed to be successful. Students placing below college level on the CPT for these classes, or who are self-placing should take this class.
Prerequisite: Prerequisite: MATH 095 with a C or better or appropriate placement.

MATH 097 Intermediate Algebra 5 Credits
Introduces the study of linear equations and polynomials, including equation of a line, systems of linear equations, properties of exponents, operations on polynomials, factoring, and solving factorable quadratic equations. Students should take this course if they plan to pursue a pathway that requires MATH& 141 (STEM) or MATH 147 (Business) or if they plan to transfer to a university that requires MATH 097 for admission.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 092 or an S in ABE 065.

MATH 098 Algebraic Methods 5 Credits
Focuses on the geometric and algebraic skills needed for success in precalculus and calculus. Students who plan to pursue Science, Engineering, or Math (SEM) pathways should take this course.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 097 or equivalent.

MATH 099 Functions and Advanced Algebraic Methods 3 Credits
Strengthens algebraic foundations for quadratic, rational, and radical expressions and equations. Introduces students to function notation and logarithms. Students who plan to pursue Science, Engineering, or Math (SEM) pathways should take this course.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 097 or equivalent.

MATH 101 Technical Mathematics I 5 Credits
Covers the theories and applications of mathematics used in technical fields with emphasis on problem solving strategies, measurement, algebra, geometry, unit conversions and the metric system.
Prerequisite: Prerequisite: Qualifying placement for MATH 092 or ABE 065 or an S in ABE 064.

MATH 147 Business Precalculus 5 Credits
Covers properties and applications of elementary algebraic, exponential, and logarithmic functions relevant to business and economics. Recommended for students studying business.
Prerequisite: Prerequisite: MATH 097 with a C or better or appropriate placement.

Distribution Requirements: Natural Science, Quantitative

MATH 205 Linear Algebra 5 Credits
Covers vectors, matrices, linear transformations, eigenvalues and eigenvectors.
Prerequisite: Prerequisite: MATH& 151 with a C or better

Distribution Requirements: Natural Science, Quantitative

MATH 214 Undergraduate Research I 1-6 Credits
Prepares students to successfully complete their own scientific research project by introducing the use of the scientific method, ethics, research methods, proposal writing, and presentation techniques. Provides a framework for students to design, plan, and carry out their own scientific research project in collaboration with peers and mentors.
Prerequisite: Prerequisite: MATH& 141 or MATH& 146 or instructor's permission.

MATH 215 Undergraduate Research II 1-5 Credits
Continues to prepare students to successfully complete their own scientific research project by introducing the use of the scientific method, ethics, research methods, proposal writing, and presentation techniques. Provides a framework for students to design, plan, and carry out their own scientific research project in collaboration with peers and mentors.
Prerequisite: Prerequisite: MATH 214.

MATH 238 Differential Equations 5 Credits
Introduces the theory of ordinary differential equations with applications to biological, chemical, and/or physical systems.
Prerequisite: Prerequisite: MATH& 152 with a C or better

Distribution Requirements: Natural Science, Quantitative

MATH 305 Linear Algebra 5 Credits
Covers vectors, matrices, linear transformations, eigenvalues and eigenvectors. This course is for students currently pursuing a Bachelor's program at SPSCC.
Prerequisite: Both CS 350 and CS 360 with a C or better and Admission to the BS in Computer Science program.

Distribution Requirements: Natural Science, Quantitative

Mathematics (CCN) (MATH&)

MATH& 107 Math In Society 5 Credits
Explores a variety of mathematical topics presenting mathematics as a form of art and as a tool for understanding the world around us. Designed for non-science majors. Specific topics may be drawn from geometry, number theory, set theory, and the history of mathematics.
Prerequisite: Prerequisite: MATH 095 with a C or better or appropriate placement.

Distribution Requirements: Quantitative, Natural Science

MATH& 141 Precalculus I 5 Credits
Covers power, exponential, and logarighmic functions and analytic geometry. Students who plan to pursue a Science, Engineering, or Math (SEM) pathway should take this course.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH 098 or MATH 099 or equivalent.

Distribution Requirements: Natural Science, Quantitative

MATH& 142 Precalculus II 5 Credits
Covers trigonometric, polynomial, and rational functions and their applications.
Prerequisite: Prerequisite: Appropriate placement or a C or better in MATH& 141.

Distribution Requirements: Natural Science, Quantitative

MATH& 146 Introduction to Statistics 5 Credits
Covers basic probability, descriptive statistics, and inferential statistics.
Prerequisite: Prerequisite: MATH 096 with a C or better.

Distribution Requirements: Natural Science, Quantitative

MATH& 148 Business Calculus 5 Credits
Covers introductory calculus for business students.
Prerequisite: Prerequisite: MATH 147 with a C or better or appropriate placement.

Distribution Requirements: Natural Science, Quantitative

MATH& 151 Calculus I 5 Credits
Covers differential calculus of single-variable functions.
Prerequisite: Prerequisite: MATH& 142 with a C or better

Distribution Requirements: Quantitative, Natural Science

MATH& 152 Calculus II 5 Credits
Covers integral calculus of single-variable functions.
Prerequisite: Prerequisite: MATH& 151 with a C or better.

Distribution Requirements: Quantitative, Natural Science

MATH& 153 Calculus III 5 Credits
Covers advanced calculus topics including infinite series, Taylor polynomials, Taylor series representation of functions and calculus in polar coordinates and in parametric equations. Continuation of MATH& 152.
Prerequisite: Prerequisite: MATH& 152 with a C or better.

Distribution Requirements: Quantitative, Natural Science

MATH& 254 Calculus IV 5 Credits
Covers analytic geometry in three dimensions and multivariable calculus.
Prerequisite: Prerequisite: MATH& 152 with a C or better

Distribution Requirements: Natural Science, Quantitative