Algebra 2

The study of patterns in numbers

Guaranteed Course Content:

Equations and Inequalities

Linear Relations and Functions

Systems of Equations and Inequalities

Quadratic Functions

Polynomial Functions

Radical Equations and Inequalities

Rational Expressions and Equations

Exponential and Logarithmic Relations

Conic Sections

Sequences and Series

Probability and Statistics

Trigonometric Functions

Trigonometric Graphs and Identities

Students in all CTHS mathematics classes will actively develop their skills in logic and reasoning, communications, problem solving, real world applications, and mathematical modeling.

Pre-Calculus

The study of advanced algebraic relationships and trigonometry

Guaranteed Course Content:

Polynomial and Rational Functions

Exponential and Logarithmic Functions

Trigonometry

Analytic Geometry

Sequences and Series

Introduction to Calculus

Calculus

The study of patterns in change

Guaranteed Course Content:

Limits and Continuity

Derivatives

Applications of Derivatives

Differential Equations

Integration

Applications of Integration

Math Department Curriculum Map

The essence of mathematics is not to make simple things complicated, but to make complicated things simple.

—Stan Gudder

To The Students

Mathematics is an essential element in building the skills needed in students' career fields. Our mission is to provide a broad general mathematics background while including aspects of every pathway. Mathematics at Mat-Su Career and Technical High School has a traditional academic curriculum base with the integration of pathway-related materials and assignments throughout the courses. In the end, it is essential for all to see that no matter what the career, mathematics is important!

At Career Tech our goal is that students won't have to ask, "When are we ever going to use this?" CTHS focuses on preparing students for their chosen career field. Math isn't just about symbols, equations, and graphs. It is really about understanding the relationships between ideas, being able to communicate them, and developing reasoning and problem-solving skills which can be used in a variety of situations.

Math is not a spectator sport – be engaged in your learning!

Algebra 1

The study of patterns in numbers

Guaranteed Course Content:

The Language and Tools of Algebra

Solving Linear Equations

Functions and Patterns

Analyzing and Graphing Linear Equations

Solving Systems of Linear Equations

Solving Linear Inequalities

Polynomials

Factoring

Quadratic and Exponential Functions

Square Roots and Radicals

Rational Expressions and Equations

Statistics

Students in all CTHS mathematics classes will actively develop their skills in logic and reasoning, communications, problem solving, real world applications, and mathematical modeling.

Geometry

The study of patterns in shapes

Guaranteed Course Content:

Points and Lines

Logic and Reasoning

Angles and Arcs

Probability

Geometric Transformations

Mathematical Proofs

Congruence and Similarity

Polygons and Symmetry

Triangle Congruence

Pythagorean Theorem

Perimeter and Area

Surface Area and Volume

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