

MATHEMATICS

Math placement is determined by previous course grade, work ethic, and teacher recommendation. All seniors must earn two credits of math during the senior year.

<u>Course Title</u>	<u>Credit Type</u>	<u>Number of Credits</u>	9	10	11	12	<u>Prerequisite</u>	<u>Dual Credit/Tech Prep</u>	<u>Fee</u>	<u>SEM/YR</u>	<u>Course Description</u>
Algebra I	MAT	2	x	x	x	x				YR	This is a two-semester course that will fill a basic requirement for college entrance. The focus of the class is problem solving, pattern recognition, the symbolic thought process and the development of critical thinking skills.
Algebra Essentials	MAT & ELE	2 MAT or 2 ELE	x				Teacher Recommendation			YR	This course is designed for students who have gaps in their basic math skills. Khan academy will be used in conjunction with the MAP test to fill those gaps.
Integrated Math I & Integrated Math II (Two Year Sequence)	MAT	2 ALG & 2 GEO	x	x	x	x	Teacher Recommendation			TWO YRS	This is a four-semester course that will fill a basic requirement for college entrance. The class intermingles the algebra and geometry concepts listed in a exploratory team based format. The concepts covered are: problem solving, pattern recognition, the symbolic thought process, development of critical thinking skills, studying points, lines, circles and their segments, and planes. It is then extended into studying all other figures, primarily triangles and quadrilaterals (4 sided figures). Much attention is given to the right triangle and its applications, such as the Pythagorean theorem. Trigonometry is introduced as well as finding the areas and volumes of solids. Students who successfully complete the Integrated Math Sequence will earn two Algebra and two Geometry credits.

Geometry	MAT	2		x	x	x	Algebra I			YR	Geometry begins by studying points, lines, circles and their segments, and planes. It is then extended into studying all other figures, primarily triangles and quadrilaterals (4 sided figures). Much attention is given to the right triangle and its applications, such as the Pythagorean theorem. Trigonometry is introduced as well as finding the areas and volumes of solids.
Algebra Topics	MAT	2			x	x	Algebra I & Geometry or Informal Geometry			YR	This course is designed for the math student who has completed Algebra I and Geometry or Informal Geometry, but is not quite ready for a full Algebra II course. It provides a transition from the Algebra I course to the Algebra II course by reviewing algebra concepts and then extending these concepts a bit further. This course does not replace Algebra II (is not a college prep course).
Algebra II	MAT	2			x	x	Algebra I & Geometry or Informal Geometry w/teacher recommendation			YR	Four-year College and Universities now require Algebra II for entrance, and consider the student deficient in math without it. This class is an extension of Algebra I and Geometry and will deal with mathematical reasoning and problem solving, the concepts and language of algebra, functions, and the concepts and principles of Geometry.
MATH 143 - College Algebra	MAT, ELE	1.5			x	x	Algebra I, Geometry & Algebra II	Dual Credit through CSI 1.5 HS Credits, 3 College Credits	See Dual Credit / Online Course for more info.	SEM	Course Description: This course includes fundamental concepts of Algebra; equations and inequalities; functions and graphs; polynomial, rational, exponential and logarithmic functions; systems of equations and inequalities; conics; the Binomial Theorem.

MATH 144 -Trigonometry	MAT, ELE	1			X	X	Algebra I, Geometry, Algebra II & Math 143	Dual Credit through CSI 1 HS Credits, 2 College Credits	See Dual Credit / Online Course for more info.	SEM	Course Description: This course covers right triangle and circular function approaches to trigonometry, graphs of trig functions, trig identities, conditional equations, right and non-right triangle applications of trigonometry, inverse trig functions, trigonometry of complex numbers including DeMoivre's Theorem, polar coordinates and equations, parametric equations.
Statistics	MAT, ELE	2			x	x	Algebra I, Geometry, Algebra II			YR	Most college programs have a Statistics requirement; this course will give students a good introduction to a college statistics course. It will cover organizing data, averages and variations, elementary probability theory, the binomial probability distribution, the geometric and Poisson probability distribution, normal distributions, an introduction to sampling distributions, estimations, hypothesis testing, and regression and correlation. This course requires students to read a college textbook.
Consumer Math	MAT, ELE	2				x	Algebra I & Geometry or Informal Geometry and Teacher & Counselor Recommendation			YR	This course emphasizes solving practical problems in income, personal banking, consumer credit, buying a home, and investing. Scientific calculators are suggested, but not required.
Calculus (Math 170)	MAT, ELE	2				x	Algebra I, Geometry, Algebra II & Pre-Calculus	Dual Credit through CSI	See Dual Credit / Online Course for more info.	YR	The first semester is a review of pre-calculus, with an introduction to differential calculus and its applications. The second semester is an introduction to integral calculus and its applications, including studying functions and infinite series. Math 170 college credit is available through College of Southern Idaho.