## **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.

Course Title	Credit	Number of	9	1	1	1	Prerequisite	Dual	Fee	SE	Course Description
<u> </u>	Type	Credits		0	_	2		Credit/Tech Prep	<u> </u>	<u>M/</u> Y R	
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 & 2 ELE	х				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.
Informal Geometry	MAT	2		х	х	х	Algebra I			YR	This course focuses on the key topics that provide a strong foundation in the essentials of geometry. While this course does cover all the concepts in geometry, it does not do so at the depth required for trigonometry. As a result this course is recommended for those students who are not interested in pursuing math beyond Algebra II.
Geometry	MAT	2		Х	×	х	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.

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Algebra Topics	MAT	2			х	х	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.
Algebra II	MAT	2			х	х	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.
Pre- Calculus	MAT	2			x	х	Algebra I, Geometry & Algebra II	Dual Credit through CSI	Fee if taking for Dual Credit	YR	The first semester is a study of linear, quadratic, and polynomial functions, as well as inverse functions and their properties, and logarithms. Much attention is given to graphing these functions with and without the TI-82 graphing calculator. The second semester is a study of analytic geometry (circles, ellipses, and hyperbolas), but mostly trigonometry. Inequalities are reviewed and extended. Math 147 college credit is available through College of Southern Idaho.
Statistics	MAT	2			x	x	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.

Course Title	Credit Type	Number of Credits	9	<u>1</u> <u>0</u>	1 1	<u>1</u> <u>2</u>	<u>Prerequisite</u>	<u>Dual</u> <u>Credit/Tech</u> <u>Prep</u>	<u>Fee</u>	<u>SE</u> <u>M/</u> Y R	Course Description
Calculus (Math 170)	MAT	2				х	Algebra I, Geometry, Algebra II & Pre-Calculus	Dual Credit through CSI	Fee if taking for Dual Credit	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.
Consumer Math	MAT	2				х	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.