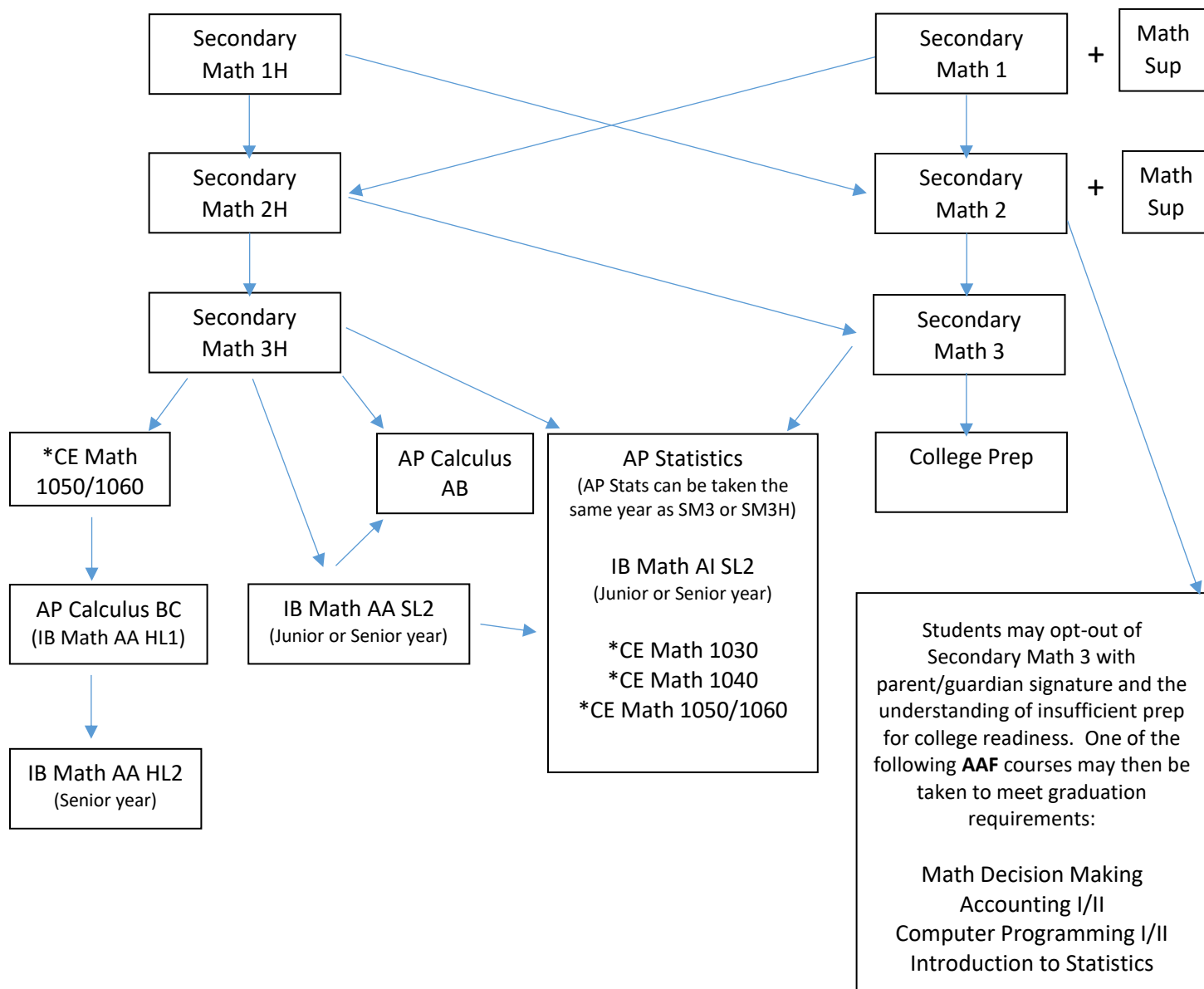


<p>Secondary Math 1</p> <p>The purpose of Secondary Math I is to formalize and extend the math students learned in the middle grades. Students in this course will deepen and extend their understanding of linear relationships, explore exponential phenomena, apply linear regression techniques to data, and use properties and theorems of congruent geometric figures. The final unit of this course will tie together the algebraic and geometric ideas the students have studied.</p> <p><i>Honors</i> students will also represent and model with vector quantities, use matrices in application and perform operations on vectors and matrices.</p>	<p>Secondary Math 2</p> <p>Students will focus on quadratic expressions, equations, and functions, extend the set of rational numbers to the set of complex numbers, link probability and data through conditional probability and counting methods, study similarity and right triangle trigonometry, and study circles with their quadratic algebraic representations.</p> <p><i>Honors</i> students will also represent complex numbers and their operations on the complex plane, solve systems of equations, prove and apply trigonometric identities, express conic sections algebraically, and solve problems using volume measurements.</p>	<p>Secondary Math 3</p> <p>Students will focus on pulling together and applying the accumulation of learning that they have from their previous courses. They will apply methods from probability and statistics, expand their repertoire of functions to include polynomial, rational, and radical functions. They will expand their study of right triangle trigonometry and will bring together all of their experience with functions and geometry to create models and solve contextual problems.</p> <p><i>Honors</i> students will also use logarithmic and trigonometric functions, build functions from existing functions, extend the domain of trigonometric functions using the unit circle, and prove trigonometric identities.</p>
<p>MATH 1030 Intro to Quantitative Reasoning</p> <p>The course focuses on the development of analytical thinking through the application of math to real-life problems. Topics include modeling, logic, financial math, probability, statistics, and geometry. Appropriate for college study in: English/Languages, Fine Arts, Humanities, Performing Arts.</p> <p>* CE courses have additional requirements per course and are only available for 9th-12th grade.</p>	<p>MATH 1040 Intro to Statistics</p> <p>Includes descriptive and inferential statistical methods. Topics include sampling design, descriptive statistics, linear regression and correlation, probability, sampling distributions, and hypothesis testing and confidence intervals. Appropriate for study in: History, Nursing, Psychology, Social Sciences.</p> <p>* CE courses have additional requirements per course and are only available for 9th-12th grade.</p>	<p>Math 1050/1060 College Algebra & Trigonometry</p> <p>An in-depth exploration of algebra topics designed to ultimately prepare students for Calculus or further education courses. Topics include functions, including polynomial, rational, exponential, and logarithmic; systems of equations; matrices and determinants; partial fraction decomposition; conics; and sequences and series. Appropriate for college study in: Business, Biological and Physical Sciences, Engineering.</p> <p><i>Prerequisite course for BC Calculus</i></p> <p>* CE courses have additional requirements per course and are only available for 9th-12th grade.</p>
<p>College Prep Mathematics</p> <p>College Prep formalizes and reinforces concepts from SM 1-3 to provide students with the foundational skills and understanding prerequisite to college math. Students will solve linear and quadratic equations and linear inequalities. They will use polynomial and rational expressions and functions, radicals and complex numbers, and exponential and logarithmic expressions and functions to model and solve problems. They will explore conic sections and represent parabolic data.</p>	<p>Introduction to Statistics</p> <p>Statistics is a branch of mathematics that explores concrete connections with everyday living. Students will develop critical thinking skills with life-long application. Students will gather, graph, examine, compare and interpret data using technology, including graphing calculators or computer statistics software. They will describe data and make informed decisions and predictions based on data.</p>	<p>Math Decision Making</p> <p>This course includes mathematical decision making in finance, modeling, probability and statistics, and making choices. The four quarters of instruction are independent of each other, allowing students to enter and exit the course quarterly. Students will make sense of authentic problems and persevere in solving them. Students will reason abstractly and quantitatively while communicating mathematics to others, use appropriate tools to model mathematics, and use structure and regularity of reasoning to describe mathematical situations and solve problems.</p>
<p>IB Applications & Interpretations Standard Level 2</p> <p>AI SL is appropriate for students who are interested in developing their mathematics for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. Students who take IB AI SL2 will be those who enjoy mathematics best when seen in a practical context. This subject is aimed at students who will go on to study subjects such as social sciences, natural sciences, statistics, business, some economics, psychology, and design, for example.</p>	<p>IB Analysis & Approaches Standard Level 2</p> <p>AA SL is appropriate for students who enjoy developing strong skills in mathematical thinking. AA SL is aimed at students who will go on to study subjects with substantial mathematics content such as mathematics itself, engineering, physical sciences, or economics for example. Topics include: sequences and series and applications, laws of logarithms and exponentials, simple proof, the binomial theorem, solving equations both analytically and graphically, composite trigonometric functions, and normal distribution with standardization of variables.</p>	<p>IB Analysis & Approaches Higher Level 2</p> <p>AA HL is appropriate for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments. AA HL is aimed at students who will go on to study subjects with substantial mathematics content such as mathematics itself, engineering, physical sciences, or economics for example. Topics include: permutations and combinations, partial fractions, complex numbers, proof methods, self-inverse functions, function inequalities and the modulus function, vector theory and vector algebra, Bayes theorem, and density functions.</p>
<p>AP Calculus AB</p> <p>AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.</p>	<p>AP Calculus BC / IB Analysis & Approaches HL1</p> <p>AP Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.</p>	<p>AP Statistics</p> <p>The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: describing patterns and departures from patterns, planning and conducting a study, exploring random phenomena using probability and simulation, and estimating population parameters and testing hypotheses. The course includes, univariate, bivariate, and categorical data patterns and models, and statistical inferences and significance tests.</p>

West High School



- **Graduation requirements:** The Utah State Board of Education (USBE) has listed successful completion of Secondary Mathematics I, II, and III or higher as criteria for graduation requirements.
- **Moving to the next course:** Students must have 0.5 credit of a prerequisite math course before advancing to the next level for teachers to instruct on level and challenge all students appropriately. Students who have not demonstrated an understanding of a prerequisite course, will need to retake the course. Students may earn a max 0.50 credit through credit recovery.
- **Sec Math 1 + Sup and Sec Math 2 + Sup** are double-block math courses which a student may be placed in based on recommendation from previous math teacher and/or guardian that the student may benefit from additional time and support provided in the double-block course.
- **Sec Math 2/3 H:** Students may take Secondary II Honors and Secondary III Honors consecutively in one year by enrolling in the double-blocked Sec Math 2/3 H course.
- **IB Math courses** can only be taken as a Junior or Senior.
- **AP exams** can only be given to students enrolled in ninth through twelfth grade.
- **Concurrent Enrollment courses** have additional requirements per course (ACT or Accuplacer Scores, and/or C average in Sec I, II and III). Concurrent courses are only available to students enrolled in ninth through twelfth grade.