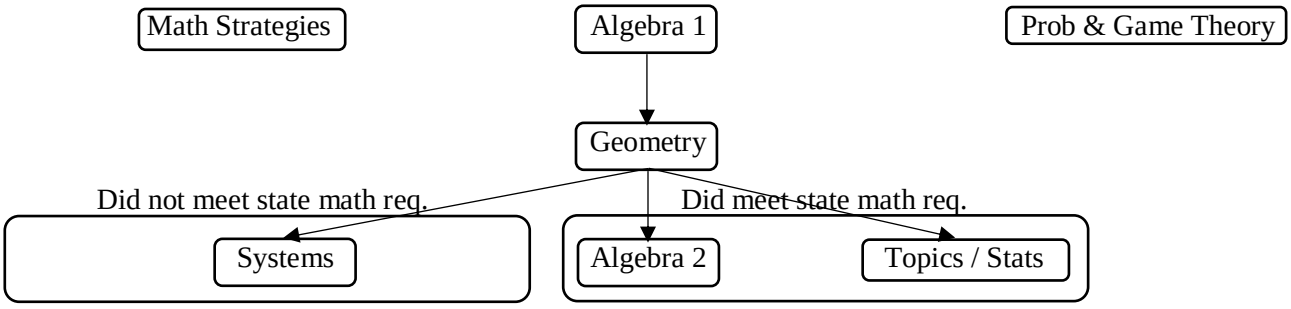
Math Course Flow Chart for HBHS:



General Notes:

A student who has not passed **both** semesters of Algebra 1 should be enrolled in Algebra 1. It is exceedingly difficult to succeed in a later course without the understanding gained in the previous course.

A student who has not passed **both** semesters of Geometry should be enrolled in Geometry. If the student only failed second semester, they may take Algebra Topics first semester and Geometry second semester **with pre-approval from a math teacher.**

A student who has passed Algebra 1 and Geometry has three possibilities. If the student has:

- not yet passed the EOC/SB, they **must** be enrolled in Math Systems
- passed the EOC/SB and needs 0.5, they could take either: 1st semester Algebra 2 **or** Topics **or** Stats
- passed and need 1.0, they could take either: Algebra 2 **or** Topics and Stats

HBHS Math Offerings (alphabetical):

ALGEBRA 1 – 2 Semesters – 1.0 Credit **GRADUATION REQUIREMENT**
CONTENT: Algebra 1 serves as the foundation for the study of mathematics at the high school. It is the first course of a traditional sequence focusing on algebra and linear, quadratic, and exponential functions, systems of functions, polynomials and factoring. Students can expect an active learning environment, using engaging everyday contexts to develop mathematical concepts. Topics include investigating patterns in data, developing methods to represent and predict change, modeling linear and exponential situations, investigating properties of 2 and 3 dimensional spaces, and utilizing simulation models to describe and understand chance.

ALGEBRA 2 – 2 Semesters – 1.0 credit
PREREQUISITE: Geometry or Equivalent
CONTENT: Algebra 2 is the third year of the traditional math sequence. Topics will include multivariate modeling, symbol sense and algebraic reasoning, families of functions including rational and radical functions, logarithms and advanced trigonometry. Students who successfully complete Algebra 2 will be prepared to move on to Pre-calculus.

ALGEBRA TOPICS – 1 Semester – 0.5 Credit
PREREQUISITE: has ***at least*** passed Algebra1, or by recommendation
CONTENT: This one-semester class delves deeper into the Holt Algebra 2 book and beyond, exploring topics normally skipped due to time constraints such as:
• Matricies and Advanced Systems • Sequences and Series • Vectors • basic Computer Science

GEOMETRY – 2 Semesters – 1.0 Credit **GRADUATION REQUIREMENT**
PREREQUISITE: has ***at least*** passed Algebra1, or by recommendation
CONTENT: Geometry is the second year of the traditional math sequence. Students explore the following concepts and topics: • Points, Lines and Planes • Geometric Proofs • Triangles, Quadrilaterals and Polygons • Right Triangles and Trigonometry • Transformational Geometry

MATH STRATEGIES – 2 Semesters – 1.0 credit; Grades 9-12
CONTENT: Math Strategies is a course designed to meet the specific needs of students receiving special services. ***Please contact Jeanne before signing any student up for this class.***

MATH SYSTEMS – 2 Semesters – 1.0 credit; Grades 11-12 GRADUATION REQUIREMENT*****
PREREQUISITE: Teacher Recommendation / Counselor placement for math support
CONTENT: ***Math Systems is only a graduation requirement for students who have not met state standards in math.*** This course will provide a segmented instructional approach with assessments embedded in the instruction as an alternative opportunity for students who have not met standard on a high school End-of-Course Exam in either Algebra or Geometry. The segmented course will assist the students to meet standard by increasing mathematical instruction time and improving competencies. As a result, the students will develop a feeling of hope and confidence from experiencing success. The course will provide intensive, Common Core Standards aligned instruction with three built-in assessments aligned to the Test and Item specifications. The assessments are provided by the state as a way of marking progress toward high school math standards.

PROBABILITY AND GAME THEORY – 2 Semesters (Wednesday Only) – 0.5 Credit
PREREQUISITE: none, but Algebra 1 recommended
CONTENT: Students will explore probability and combinatorics. They then analyze many different types of board and card games to see what makes them fun and challenging. Students then use this knowledge to develop and playtest their own game.

STATISTICS – 1 Semester – 0.5 Credit
PREREQUISITE: has ***at least*** passed Algebra1, or by recommendation
CONTENT: Students will be introduced to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The following topics will be addressed:
• Organization, Display, and interpretation of data
• Producing Data: Samples, Simulations, and Experimental Design
• Probability: Probability Rules and Sampling Distributions