

The background is a light green color with various faint, hand-drawn mathematical symbols and geometric shapes scattered throughout. These include a cube, a cone, a sphere, a cylinder, a pyramid, and several algebraic expressions like $\frac{a \times b}{x}$, $\sqrt{x-y}$, and $(x-y)^2$.

MATHEMATICS COURSE GUIDE

HARTLAND HIGH SCHOOL

MATH IS EVERYWHERE!

Path to Success!

The following flowchart illustrates the many paths available to HHS students. Wherever your journey begins, be sure your chosen path has enough options to last until graduation.

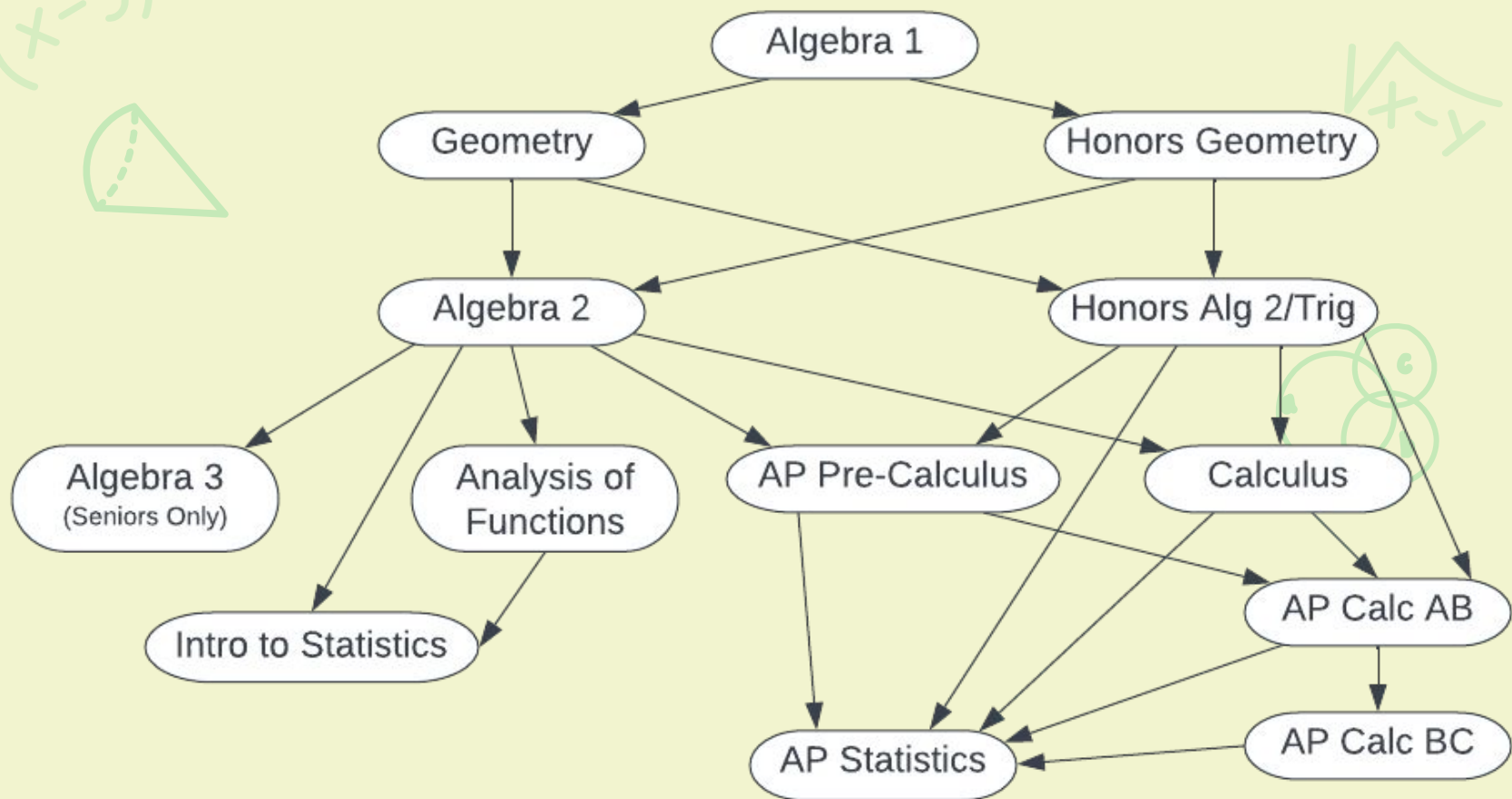
Extra! Extra!

These pages provide *supplemental* information to the official HHS Course Selection Guide for our optional math classes beyond the traditional Alg 1 → Geo → Alg 2 pathway.

Need More Info?

Please feel free to reach out to any HHS math teacher for more information!

COURSE OPTIONS FLOWCHART

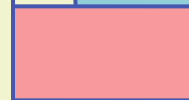
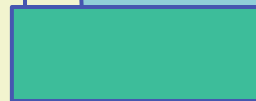




Honors Geometry

Hartland Math
Electives

- ❖ Pre-Requisites: 3.7 or higher in both Algebra 1A and Algebra 1B
- ❖ Great For:
 - Students with a good work ethic and who complete all homework
 - Students with an end goal of calculus topics while in high school
- ❖ Things to know:
 - Expect homework every day
 - All tests will be primarily open ended style questions with limited to no multiple choice

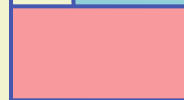
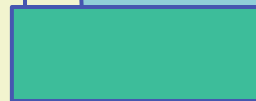




Honors Algebra 2 and Trigonometry

Hartland Math
Electives

- ❖ Pre-Requisites: 3.7 or higher in all semesters of Algebra 1 AND Geometry (alternately: 3.3 or higher in all semesters of Honors Geometry)
- ❖ Great For:
 - Students with a good work ethic and who complete all homework
 - Students with an end goal of calculus topics while in high school



Algebra 3

Hartland Math
Electives

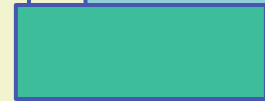
- ❖ Pre-Requisites: completion of Algebra 2
 - Note: this class is only open to seniors coming directly from Algebra 2
- ❖ Great For:
 - Students with an end goal of a non-math related field in college or attending trade school/attaining apprenticeships/enlisting in the military
 - Students with a good work ethic
 - Students who struggle with math but show a desire for improvement
 - Students who need help preparing for math placement tests
- ❖ Things to know:
 - ALEKS online assignments are required weekly



Analysis of Functions

Hartland Math
Electives

- ❖ Pre-Requisites: 2.0 or higher in Algebra 2A and Algebra 2B
- ❖ Great For:
 - Students who struggled in Algebra 2 but still plan to pursue additional math classes in the future
- ❖ Things to know:
 - Topics will be selected from typical Pre-Calculus course topics, but lessons are taught at a slower pace to allow time for additional practice and activities to enhance understanding
 - Students will need a graphing calculator



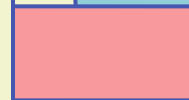
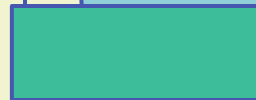


AP Pre-Calculus

- ❖ Pre-Requisites: 3.3 or higher in Algebra 2
- ❖ Great For:
 - Students who are ready for the rigor and workload of an AP class, but not quite ready for calculus topics.
 - Students with a good work ethic and who complete all homework
 - Students with an end goal of a math/science related field in college
 - Students who would like the potential to earn college credit while still in high school.

Hartland Math
Electives

$$(x-y)^2$$



Calculus

Hartland Math
Electives

- ❖ Pre-Requisites: grades from both semesters in your previous math class
 - 3.7 or higher from Algebra 2
 - 3.0 or higher from Pre-Calculus
 - 2.0 or higher from Honors Algebra 2/Trig
- ❖ Great For:
 - Students with an end goal of a math/science related field in college but are not quite ready for the rigors of AP Calculus
- ❖ Things to know:
 - Main difference between Calculus and AP Calculus is PACING





AP Calculus AB

Hartland Math
Electives

- ❖ Pre-Requisites: grades from both semesters in your previous math class
 - Successful passing of Calculus
 - 3.7 or higher from Pre-Calculus
 - 3.7 or higher from Honors Algebra 2

- ❖ Great For:
 - Students with a good work ethic and who complete all homework
 - Students with an end goal of a math/science related field in college and are ready for the rigor and expectations that come with an AP class

- ❖ Things to know:
 - Expect 20 - 30 minutes of homework each night to reinforce concepts independently

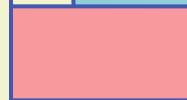
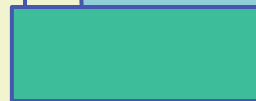




AP Calculus BC

Hartland Math
Electives

- ❖ Pre-Requisites: successful passing of both semesters of AP Calculus AB
- ❖ Great For:
 - Students with a good work ethic and who complete all homework
 - Students with an end goal of a math/science related field in college and are ready for the rigor and expectations that come with an AP class

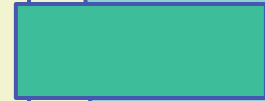




Intro to Statistics

Hartland Math
Electives

- ❖ Pre-Requisites: 2.0 or higher in Algebra 2A and Algebra 2B
- ❖ Great For:
 - Students with a good work ethic and who complete all homework
 - Students with an end goal of business/legal/medical/trade field
- ❖ Things to know:
 - Assessments will rely on both projects and traditional tests



AP Statistics

Hartland Math
Electives

- ❖ Pre-Requisites: grades from both semesters in your previous classes
 - 3.3 or higher in Algebra 2A and Algebra 2B
AND
 - 3.3 or higher in English 11A and English 11B
- ❖ Great For:
 - Students with a good work ethic, who complete all homework, and with good critical reading and thinking skills
 - Students with an end goal of business/legal/medical/trade field and are ready for the rigor and expectations that come with an AP class
- ❖ Things to know:
 - Expect 20 - 30 minutes of homework each night to reinforce concepts independently
 - Class requires extensive reading and writing with a large emphasis on showing your work

