

IS THIS MATHEMATICS COURSE RIGHT FOR YOU?

FREQUENTLY ASKED QUESTIONS

What math courses do I need to take in high school? All students need to have 4 math credits to graduate. Required courses are the successful completion of an Algebra 1 course (or Algebra 1 Honors) and a Geometry course (or Geometry Honors). A sample sequence is provided as to what courses you might expect to take in high school.

ZHS TYPICAL MATHEMATICS SUGGESTED COURSE PROGRESSION						
	Community/ Technical/ Military		4 year University Degree			
	Average Math Grades and Test Scores	Above Average Math Grades and Test Scores	Average or Above Math Grades and Test Scores	Advanced Math Grades and Test Scores	Double Advanced Math Grades and Test Scores	
Freshman	Algebra 1		Algebra 1 Honors	Algebra 1 or Algebra 1 Honors	Geometry Honors	Algebra 2 Honors
Sophomore	Geometry		Geometry Honors	Geometry or Geometry Honors	Algebra 2 Honors	AP Pre-Calculus/AP Statistics
Junior	Math for College Algebra	Algebra 2	Algebra 2 Honors	Algebra 2 or Algebra 2 Honors	AP Pre-Calculus	AP Calculus
Senior	Math for Data and Financial Literacy or Math for College Statistics	Math for College Statistics or Prob and Stats Honors	Prob Stats H/ AP Pre-Calculus/ Dual Enrollment	Prob Stats H/ AP Pre-Calculus/Dual Enrollment	AP Calculus/AP Statistics	AP Statistics

Do I need to take math all 4 years if I took either Algebra or Geometry in middle school? The requirement is 4 math credits to graduate. If you successfully complete Algebra 1 or Geometry during middle school you technically might not need math all four years of high school (but we highly recommend you take a math every year!)

What does it mean if a course is weighted? GPA is computed in the following manner. For un-weighted classes an A=4 points, B=3, C=2, D=1, and F=0 points. To compute GPA add up the points you earned and divide by the number of classes. Ex if you received 2 A's, 2 B's and 2 C's your GPA would be $(4+4+3+3+2+2)/6$ equals $18/6 = 3.0$. Weighted classes come in two forms. For AP/Dual Enrollment courses, A=5, B=4, C=3, D=2, and F=0 and for Honors courses A=4.5, B=3.5, C=2.5, D=1.5, and F=0. Graduation requirements are based off of the UNWEIGHTED GPA.

Course	Scale	Course	Scale
Algebra 1	4.0	Math for Data and Financial Literacy	4.0
Algebra 1 Honors	4.5	Math for College Statistics	4.0
Geometry	4.0	AP Pre-Calculus	5.0
Geometry Honors	4.5	Probability and Statics Honors	4.5
Algebra 2	4.0	AP Calculus (AB/BC)	5.0
Algebra 2 Honors	4.5	AP Statistics	5.0
Math for College Algebra	4.0	Dual Enrollment	5.0

Can I waiver into a course? Your parent or guardian can request a waiver into a course. The math department puts tremendous thought and effort into making the correct placement recommendation for each student and highly recommends you adhere to the teacher supplied recommendation.

Can I take two math course at once? You can take two courses at a time but the recommendation is that you consult with your counselor or math teacher to ensure you can successfully handle the coursework.

Can I take dual enrollment math courses? You can take dual enrollment courses but students are required to complete all PHSC admission requirements. Dual enrollment requests can be completed by working through your grade-level counselor.

SPECIFIC COURSE NOTES

Algebra 1/Algebra 1 Honors– The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, called units, deepen, and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. Algebra 1 students become fluent in solving characteristic problems involving the analytic geometry of lines, such as writing down the equation of a line given a point and a slope. This course is a graduation requirement.

Geometry/Geometry Honors- This course is intended to progress after the completion of Algebra 1. The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical argument. This course is a graduation requirement.

Math for College Algebra – The course is typically taken by students who do not wish to take Algebra 2. This course serves to re-enforce the content learned in Algebra 1 and enforce some of the skills needed to succeed in Algebra 2. Many students who take this course are preparing to take College Algebra at the junior college level.

Algebra 2/Algebra 2 Honors – This course is intended to be taken after the successful completion of Algebra 1 and Geometry. The course extends the knowledge gained in Algebra 1 from linear to non-linear functions, equations, and expressions. Algebra 2 is required by all 4 year colleges.

Math for Data and Financial Literacy – This course focuses on real-world applications, financial literacy, and real-world data applications. Instructional time will emphasize five areas: (1) extending knowledge of ratios, proportions and functions to data and financial contexts; (2) developing understanding of basic economic and accounting principles; (3) determining advantages and disadvantages of credit accounts and short- and long-term loans; (4) developing understanding of planning for the future through investments, insurance and retirement plans and (5) extending knowledge of data analysis to create and evaluate reports and to make predictions.

Math for College Statistics – This course will emphasize four areas: (1) analyzing and applying linear and exponential functions within the context of statistics; (2) extending understanding of probability using data and various representations, including two-way tables and Venn Diagrams; (3) representing and interpreting univariate and bivariate categorical and numerical data and (4) determining the appropriateness of different types of statistical studies.

Probability and Statistics Honors – This course is an introduction to probability and data analysis. Students will use appropriate techniques to display data, study patterns, test hypotheses, and draw conclusions from data. The use of a **graphing calculator with probability functions** is required. Basic but strong mathematical knowledge as well as strong reading skills are needed. Algebra 2 or Algebra 2 Honors is a prerequisite for this course.

AP Pre-Calculus–This course is required prior to taking AP Calculus. It will cover a more advanced look into the Algebra 2 content, trigonometry. Algebra 2 or Algebra 2 Honors is a prerequisite for this course. This is a new AP course and used to be called Pre-Calculus Honors.

AP Calculus – The course requires a student sit for the AP Exam (or repay the school the AP exam fee). Students who take this course are adept at both math and study skills and are looking to pursue a STEM major in college. AP Calculus AB is equivalent to a Calculus 1 course in college and AP Calculus BC is equivalent to both a Calculus 1 and Calculus 2 course in college.

AP Statistics – This course requires a student sit for the AP exam (or repay the school the AP exam fee). READING is a necessity for success in AP Stats so students enrolling should possess strong reading skills as well as strong math skills. Algebra 2 or Algebra 2 Honors is a prerequisite for this course.

Dual Enrollment (DE) –. Students are still allowed to complete the admission process at PHSC and take mathematics courses at PHSC campuses (with the school board paying the course fee). In the past many students indicate they intend to take DE mathematics courses but fail to apply in a timely manner to take the course. If students intend to go this route they need to meet PHSC and Pasco County School DE application timelines!