

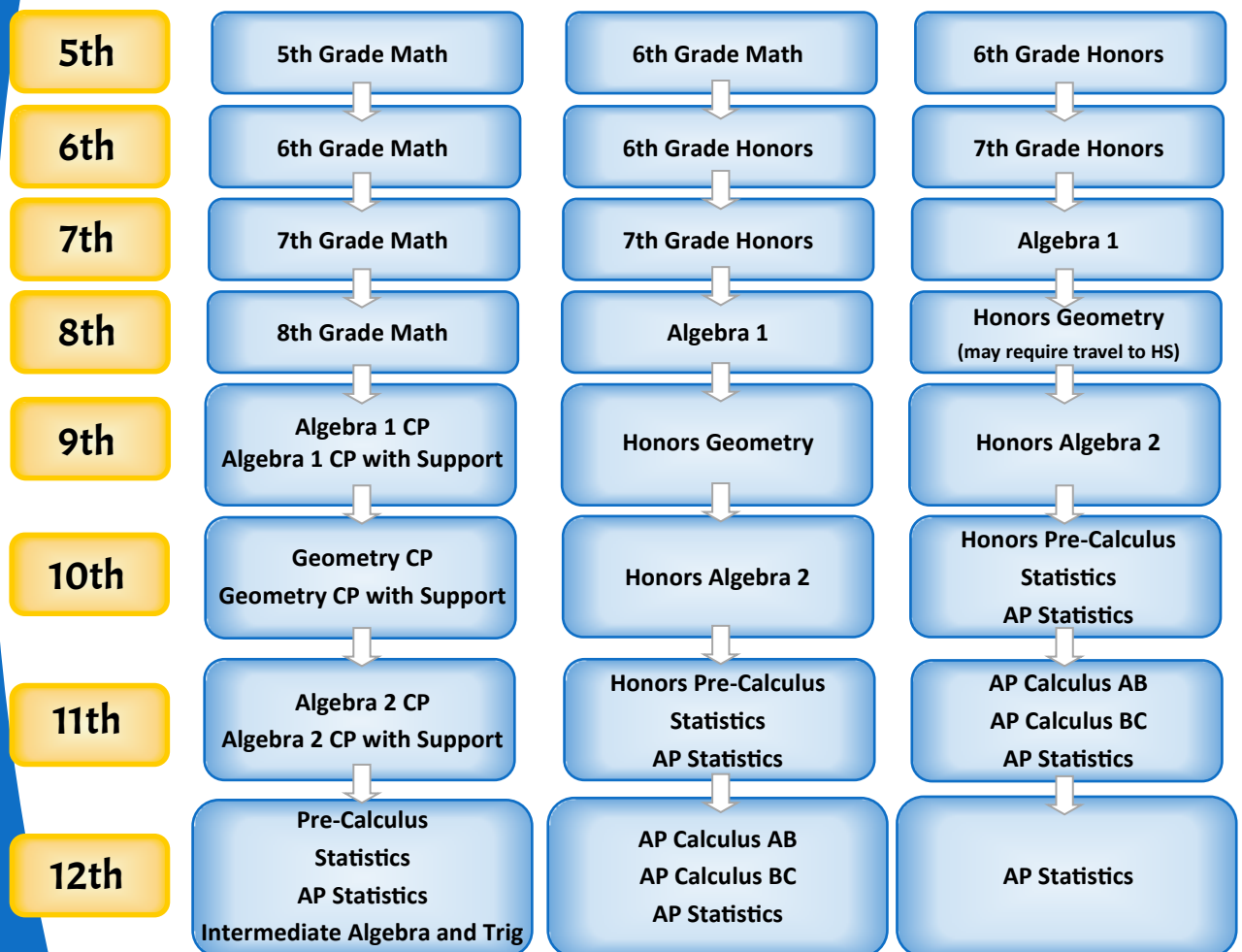
Mathematics Department

Rising Freshmen Information Night 2024

Welcome to Grosse Pointe South High School!

We look forward to working with you and your incoming freshman. Below is the **Secondary Math Pathways** chart for our school district. Occasionally horizontal movement may be recommended for individual students. The below identified pathway is intended to be the typical and expected sequence for students. At the high school, if students wish to take math courses concurrently or out of sequence, they may do so with the support and permission of the Math Department Chair(s) and their counselor. Refer to the back of this document for a description of the typical courses offered to incoming freshmen pulled from our Program of Studies. If you have any questions, please contact the math department co-chairs, Beth Bornoty at bornoty@gpschools.org and Kristie Philliben at phillik@gpschools.org.

GROSSE POINTE SOUTH HIGH SCHOOL MATH PATHWAYS



Mathematics Department

Freshmen Class Offerings

<p>307 – ALGEBRA 1 CP</p> <p>Prerequisite: Math 8</p> <p>Requirement: Teacher recommendation</p> <p>CREDIT: 1</p>	<p>This class is designed for the high school student who requires a thorough mathematical preparation to pursue those fields in college that demand a solid mathematical foundation. This course is a traditional approach to the formal study of first year Algebra. Algebra 1 builds on the generalized approach to the study of functions and representations begun in the middle school grades. Students will learn to simplify and factor expressions, solve linear and quadratic equations, and systems of equations. Students will study families of functions, their equations and their graphs including linear, quadratic, radical, rational, and exponential. Using these functions, students will model real-world situations using data and solve related problems. Units and lessons are aligned to the Common Core State Standards for Mathematics, which are designed to prepare all students for success in high school and beyond.</p>
<p>320 – ALGEBRA 1 CP SUPPORT</p> <p>Prerequisite: Math 8</p> <p>Requirement: Teacher recommendation and enrollment in Algebra 1 CP</p> <p>CREDIT: 1</p>	<p>This class is designed for the high school student who requires additional support with Algebra 1 CP. This support class is taken concurrently with Algebra 1 CP and provides additional support for students as they work to meet the curriculum expectations of Algebra 1 CP. Course content includes additional instruction on the concepts taught in class, previews of upcoming lessons, homework assistance, enriching activities, and quiz/test preparation.</p>
<p>330 - HONORS GEOMETRY</p> <p>Prerequisite: Honors Algebra 1</p> <p>Requirement: Teacher recommendation</p> <p>CREDIT: 1</p>	<p>The Honors Geometry course is rigorous and designed for students who excel in mathematics. In this course, students will engage in activities that allow them to create geometric understanding. Emphasis will be placed on developing critical thinking skills as they relate to logical reasoning and argument. Topics include logic and proof, parallel lines and polygons, perimeter and area analysis, volume and surface area analysis, similarity and congruence, trigonometry, and analytic geometry. Algebra I concepts are interwoven through the entire course to enhance student learning. This course emphasizes problem solving and logic as methods used to develop each new concept. Every effort is made to avoid stopping at the customary, fixed boundaries of the traditional mathematics course to improve students' ability in applying theory and in analyzing problems independently. Units and lessons are aligned to the Common Core State Standards for Mathematics, which are designed to prepare all students for success in high school and beyond.</p>
<p>335 – HONORS ALGEBRA II</p> <p>Prerequisite: Honors Geometry</p> <p>Requirement: Teacher recommendation</p> <p>CREDIT: 1</p>	<p>The Honors Algebra 2 course is designed for students who have a strong degree of mastery of material learned in previous math courses and are capable of handling the rigor and pace of an honors course. This course is an in-depth study of functions [quadratic, polynomial, radical, rational, exponential, and logarithmic]. Graphing, solving, and application are all studied in great detail. Other topics include probability and statistics, conics, sequences and series, matrices, as well as an in-depth study of trigonometry. Every effort is made to avoid stopping at the customary, fixed boundaries of the traditional mathematics course to improve students' ability in applying theory and in analyzing problems independently. Units and lessons are aligned to the Common Core State Standards for Mathematics, which are designed to prepare all students for success in high school and beyond. A graphing calculator is used throughout the course to enhance student learning.</p>