



$$\begin{aligned} & B \lim_{x \rightarrow 1} \frac{ctgx-2}{2\sqrt{1-x^2}} \quad \int (x \pm a)^c \quad \sum_{i=1}^n i = \frac{n(n+1)}{2} \quad A-C= \\ & +y^2=Z \quad S_3 = \begin{bmatrix} 1 & 0 & 0 \\ 1 & 0 & 1 \\ 0 & 0 & 1 \end{bmatrix} \quad \phi = \sqrt{\frac{\sum (x-m)^2}{n-1}} \quad s = \int_2^{10} 5t dt \\ & \pi \approx 3.1415 \quad \sin \alpha \quad y = \frac{\Delta x}{\Delta z} \\ & P = r^2 \pi \end{aligned}$$

MATH COURSE SELECTION:
Which math course(s) should I take next year?

$$\begin{aligned} & f = x \quad e = 2.718 \quad \tan(2\alpha) = \frac{2 \tan(\alpha)}{1 - \tan^2(\alpha)} \\ & P = \sum_{i=0}^{\infty} X_i^a \quad \ln = \sqrt{axb} \quad \sum_{n=0}^{\infty} \frac{x^n}{n!} \\ & y = \frac{\Delta x}{\Delta z} \quad \sin \alpha = \frac{b}{c} \quad a^2 + b^2 = c^2 \\ & = (y-1)^2 \end{aligned}$$





Things to consider

01

What is my current math course?
How am I performing in this course?

02

What is my math ability? How have I performed in my previous math classes?

03

What are my interests? Do I desire a future in math/science or do any courses pique my interest?

04

Do I have the prerequisites for the course I want to take?

Current Academic Geometry Students



Algebraic Reasoning

This course can be used as a bridge course between Geometry & Algebra 2 to sharpen your Algebra skills.

Recommended if:

Struggled in Algebra 1 as well as Geometry with a Geometry grade below 75.

*Algebra 1 & Geometry prereq



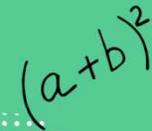
Aca Algebra 2

This course is an extension of Algebra 1 and broadens the study of functions.

Recommended if:

80 or above in 2nd sem. Alg. 1.
Recommend speaking with teacher if between 75 and 77.

* Algebra 1 & Geometry prereq



Algebra 2 KAP

This course explores the topics covered in Academic Algebra 2 in greater depth and with more complex mathematical calculations.

Recommended if:

95 or better in Aca Geom. with an 85 or better in 2nd sem. Alg. 1

* Algebra 1 & Geometry prereq

Current KAP Geometry Students



Aca Algebra 2

This course is an extension of Algebra 1 and broadens the study of functions.

Recommended if:
75 or below

*** Algebra 1 & Geometry prereq**

Algebra 2 KAP

$$(a+b)^2$$

This course explores the topics covered in Academic Algebra 2 in greater depth and with more complex mathematical calculations.

Recommended if:

80 or better in KAP Geom. with an 85 or better in 2nd sem. Alg. 1. 75 - 79 in KAP Geom. with 95 or above in 2nd sem. Alg. 1.

*** Algebra 1 & Geometry prereq**

Current Algebraic Reasoning Students



Academic Algebra 2

This course is an extension of Algebra 1 and broadens the study of functions.

Recommended if:

80 or above in 2nd sem. Alg. 1
Recommend speaking with teacher if between 75 and 77

*** Algebra 1 & Geometry prereq**



Academic Statistics

This course will build on your understanding of data variability and statistical processes through real-world situations with a focus on interpretation of statistical arguments.

Recommended if:

Pursuing a business or non-math required degree

***Algebra 1 & Geometry credit prereq**

Current Algebra 2 Students

AP PreCalculus	Academic PreCal	Discrete Math	Academic Statistics	AP Statistics	Financial Math
<p>This course emphasizes a conceptual understanding of functions and their graphs and covers polynomial and rational functions, exponential and logarithmic functions, trigonometric and polar functions, and general functions involving parameters, vectors, and matrices.</p> <p>Recommended if: 85 or better wanting to take AB Calc or Calculus in college</p> <p>*Geometry & Alg. 2 credit prereq</p>	<p>This course deepens your mathematical understanding and fluency with algebra and trigonometry and extends your ability to make connections and apply concepts and procedures at higher levels. You will approach topics from a function point of view.</p> <p>Recommended if: 75 or better wanting STEM in college</p> <p>*Geometry & Alg. 2 credit prereq</p>	<p>This course introduces the improved efficiency of mathematical logic with quantitative techniques that would be used to work in situations that pertain to management problems involving organizations, scheduling, project planning, strategy and decision making.</p> <p>Recommended if: Not planning on majoring in engineering, science, or math</p> <p>*Algebra 2 credit prereq</p>	<p>This course will build on your understanding of data variability and statistical processes through real-world situations with a focus on interpretation of statistical arguments.</p> <p>Recommended if: Pursuing a business or non-math required degree</p> <p>*Algebra 1 & Geometry credit prereq</p>	<p>AP Statistics is equivalent to one semester of college level statistics. AP Statistics is built around four main topics: exploring data, planning a study, understanding probability theory and acquiring critical inferential reasoning skills</p> <p>Recommended if: 85 or better and not a frequent retester</p> <p>*Geometry & Alg. 2 credit prereq</p>	<p>This course teaches personal money management as you apply critical thinking skills to analyze personal financial decisions based on current and projected economic factors.</p> <p>Recommended if: Pursuing a business or non-math required degree</p> <p>*This course is a third math credit option for FHSPE students. Students who have earned credit for another third math credit course can take Financial Mathematics for elective credit.</p>

Current KAP Algebra 2 Students

AP PreCalculus	Academic PreCal	Discrete Math	Academic Statistics	AP Statistics	Financial Math
<p>This course emphasizes a conceptual understanding of functions and their graphs and covers polynomial and rational functions, exponential and logarithmic functions, trigonometric and polar functions, and general functions involving parameters, vectors, and matrices.</p> <p>Recommended if: Planning to take AB or BC Calculus</p> <p>*Geometry & Alg. 2 credit prereq</p>	<p>This course deepens your mathematical understanding and fluency with algebra and trigonometry and extends your ability to make connections and apply concepts and procedures at higher levels. You will approach topics from a function point of view.</p> <p>Recommended if: Planning to take AB Calculus</p> <p>*Geometry & Alg. 2 credit prereq</p>	<p>This course introduces the improved efficiency of mathematical logic with quantitative techniques that would be used to work in situations that pertain to management problems involving organizations, scheduling, project planning, strategy and decision making.</p> <p>Recommended if: Not planning on majoring in engineering, science, or math</p> <p>*Algebra 2 credit prereq</p>	<p>This course will build on your understanding of data variability and statistical processes through real-world situations with a focus on interpretation of statistical arguments.</p> <p>Recommended if: Pursuing a business or non-math required degree</p> <p>*Algebra 1 & Geometry credit prereq</p>	<p>AP Statistics is equivalent to one semester of college level statistics. AP Statistics is built around four main topics: exploring data, planning a study, understanding probability theory and acquiring critical inferential reasoning skills</p> <p>Recommended if: 75 or better</p> <p>*Geometry & Alg. 2 credit prereq</p>	<p>This course teaches personal money management as you apply critical thinking skills to analyze personal financial decisions based on current and projected economic factors.</p> <p>Recommended if: Pursuing a business or non-math required degree</p> <p>*This course is a third math credit option for FHSPE students. Students who have earned credit for another third math credit course can take Financial Mathematics for elective credit.</p>

Current PreCalculus Students

AP Calc AB	Discrete Math	Academic Statistics	AP Statistics	Financial Math
<p>AP Calculus AB is equivalent to the first semester of college-level Calculus. This course emphasizes a conceptual understanding of calculus utilizing a multi-representational approach and covers limits, derivatives, integrals and approximation</p> <p>Recommended if: 85 or better</p> <p>*PreCalculus or AP Precalculus credit prereq</p>	<p>This course introduces the improved efficiency of mathematical logic with quantitative techniques that would be used to work in situations that pertain to management problems involving organizations, scheduling, project planning, strategy and decision making.</p> <p>Recommended if: 75 or below</p> <p>*Algebra 2 credit prereq</p>	<p>This course will build on your understanding of data variability and statistical processes through real-world situations with a focus on interpretation of statistical arguments.</p> <p>Recommended if: Pursuing a business or non-math required degree</p> <p>*Algebra 1 & Geometry credit prereq</p>	<p>AP Statistics is equivalent to one semester of college level statistics. AP Statistics is built around four main topics: exploring data, planning a study, understanding probability theory and acquiring critical inferential reasoning skills</p> <p>Recommended if: 80 or better</p> <p>*Geometry & Alg. 2 credit prereq</p>	<p>This course teaches personal money management as you apply critical thinking skills to analyze personal financial decisions based on current and projected economic factors.</p> <p>Recommended if: Pursuing a business or non-math required degree</p> <p>*This course is a third math credit option for FHSPE students. Students who have earned credit for another third math credit course can take Financial Mathematics for elective credit.</p>

Current KAP PreCalculus Students

AP Calc BC	AP Calc AB	Academic Statistics	AP Statistics	Financial Math
<p>AP Calculus BC is equivalent to two semesters of college-level Calculus. Topics include parametric, polar and vector functions as well as polynomial approximations and series.</p> <p>Recommended if: 85 or better</p> <p>Majoring in engineering, pre-med, or math. Should not be a frequent retester</p> <p>*PreCalculus or AP Precalculus credit prereq</p>	<p>AP Calculus AB is equivalent to the first semester of college-level Calculus. This course emphasizes a conceptual understanding of calculus utilizing a multi-representational approach and covers limits, derivatives, integrals and approximation</p> <p>Recommended if: 85 or better</p> <p>*PreCalculus or AP Precalculus credit prereq</p>	<p>This course will build on your understanding of data variability and statistical processes through real-world situations with a focus on interpretation of statistical arguments.</p> <p>Recommended if:</p> <p>Pursuing a business or non-math required degree</p> <p>*Algebra 1 & Geometry credit prereq</p>	<p>AP Statistics is equivalent to one semester of college level statistics. AP Statistics is built around four main topics: exploring data, planning a study, understanding probability theory and acquiring critical inferential reasoning skills</p> <p>Recommended if: 75 or better</p> <p>*Geometry & Alg. 2 credit prereq</p>	<p>This course teaches personal money management as you apply critical thinking skills to analyze personal financial decisions based on current and projected economic factors.</p> <p>Recommended if: Pursuing a business</p> <p>*This course is a third math credit option for FHSPE students. Students who have earned credit for another third math credit course can take Financial Mathematics for elective credit.</p>

Current AP Statistic Students

Data Science

This course will offer students valuable experiences in the emerging field of Data Science including an overview of the types of data, questions, and tools that data scientists work with. Students will utilize statistical concepts with the aid of technology to develop computational thinking and exploratory data analysis skills that will allow them to use predictive analytics in order to answer questions that arise for large-scale datasets.

Recommended if:
80 or better in AP Stats

***Stats or AP Stats credit prereq**

AP Calc AB

AP Calculus AB is equivalent to the first semester of college-level Calculus. This course emphasizes a conceptual understanding of calculus utilizing a multi-representational approach and covers limits, derivatives, integrals and approximation

Recommended if:
PreCal grade of 85 or better

***PreCalculus or AP Precalculus credit prereq**

AP Calc BC

AP Calculus BC is equivalent to two semesters of college-level Calculus. Topics include parametric, polar and vector functions as well as polynomial approximations and series.

Recommended if:
Only if took PreCal KAP/GT

***PreCalculus or AP Precalculus credit prereq**

Other Upper Level Options

Multivariable Calculus KAP

Students take the concepts learned in the single variable calculus course and extend them to multiple dimensions. Topics covered include vectors, vector valued functions, coordinate systems, surfaces, partial derivatives, multiple integrals and vector calculus. These mathematical tools and methods are used extensively in the physical sciences, engineering, economics and computer graphics.

* AP Calculus BC credit prereq

AP Computer Science A

AP Computer Science A emphasizes programming methodology, procedural abstraction, in- depth study of algorithms, data structures and data abstractions and is taught in Java. Students enrolled in an AP course are expected to take the corresponding Advanced Placement exam. This course is offered at the home campus.

Successful completion of this course awards one advanced math credit and one language other than English credit. The advanced math credit will be awarded with the student's earned, numeric grade and corresponding grade points. The language other than English credit will be awarded with the student's earned, numeric grade but no grade points are calculated in the GPA.

* Algebra 1 credit prereq

Accounting II

Accounting II continues the investigation of accounting, including how this field is impacted by industry standards as well as economic, financial, technological, international, social, legal and ethical factors. Students engage in managerial and cost accounting activities while formulating and interpreting financial information for use in making management decisions.

NOTE: Accounting II is an advanced course for the Finance career cluster. This course is a third math credit option for FHSPE students. Students who have earned credit for another third math credit course can take Accounting II for elective credit only.

* Principles of Business, Marketing and Finance, Business Information Management I, Accounting I credit prereqs

Dual Credit Options

College Algebra Math 1314	Plane Trigonometry Math 1316	Elements of Calculus Math 1325	Math for Education Majors 1 & 2 Math 1350/1351
<p>Topics include quadratic, polynomial, rational, logarithmic and exponential functions, system of equations, sequences and series, matrices and determinants.</p> <p>Students earn three college credit hours upon successful completion of this course.</p> <p>HCC admission requirements & TSI requirements</p> <p>*Algebra 2 credit prereq</p>	<p>Topics include solutions of triangles, Euler identity, graphing of trigonometric functions, identities, trigonometric equations and introduction to vector analysis.</p> <p>Students earn three college credit hours upon successful completion of this course.</p> <p>HCC admission requirements, TSI requirements & Math 1314 or placement test</p> <p>*Algebra 2 & Math 1314 credit prereq</p>	<p>This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences.</p> <p>Students earn three college credit hours upon successful completion of this course.</p> <p>HCC admission requirements, TSI requirements & Math 1314 or placement test</p> <p>*Algebra 2 & Math 1314 credit prereq</p>	<p>These two courses are bundled:</p> <p>Math 1350: This course includes concepts of sets, functions, numeration systems, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. Students earn three college credit hours upon successful completion of this course.</p> <p>NOTE: Only for students in the Teaching Associate Degree program.</p> <p>Math 1351: This course covers concepts of elementary non-Euclidean geometry, probability, and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking.</p> <p>Students earn three college credit hours upon successful completion of this course. NOTE: Only for students in the Teaching Associate Degree program.</p> <p>HCC admission requirements & TSI requirements</p> <p>*Algebra 2 & Math 1314 credit prereq</p>