## MATHEMATICS

| Algebra I | 3212 |
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| GRADE: $9-12$ | PEIMS: \#03100500 |
| CREDIT: 1 |  |

CREDIT: 1
This course is a prerequisite for all other math courses and continues to build understanding of algebraic functions and equations.

| Algebra I, Double Block | 3213/3210 |
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| GRADE: $9-12$ | PEIMS: \#03100500/84100002 |

GRADE: 9-12
PEIMS: \#03100500/84100002
This course meets every day for one and one-half hours and covers the Algebra I TEKS. This "double-block" course requires courses \#3210 and \#3213.

Algebra I, Applied Double Block 9804/9824
GRADE: 9-12 PEIMS: \#03100505/84100002
CREDIT: 1
This TEKS-based course continues to build on the basic foundations and concepts of mathematics and increasing the competency in the use of algebraic functions and equations. This "double-block" course requires courses, \#9804 and \#9824. (ARD Committee placement)

## Algebra II <br> 3222

Algebra II (Pre-AP and SPHS/WHS Pre-IB) 3223
Algebra II (TAG Pre-AP and SPHS/WHS Pre-IB) 3225
GRADE: 9-12
PEIMS: \#03100600
CREDIT: 1
Students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations; extending to the study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. They will also extend their knowledge of data analysis and algebraic methods.
PREREQUISITE: Credit in Algebra I
Algebra II, Double Block
3224/3229
GRADE: 10-12
PEIMS: \#03100600/84100002
CREDIT: 1
This course meets every day for one and one-half hours and covers the Algebra II TEKS. This "double-block" course requires courses, \#3224 and \#3229.
PREREQUISITE: Credit in Algebra I
Algebraic Reasoning
GRADE: 9-12
PEIMS: \#03102540
CREDIT: 1
Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness.
PREREQUISITE: Credit in Algebra I
AQR (Advanced Quantitative Reasoning)
3636
GRADE: 9-12
PEIMS: \#03102510
CREDIT: 1
This course emphasizes statistics and financial applications, and it prepares students to use algebra, geometry, trigonometry, and discrete mathematics to model a range of situations and solve problems in engaging contexts.
PREREQUISITE: Credit in Algebra II

Calculus AB (AP) (TAG) 3632
GRADE: 9-12
PEIMS: \#A3100101

## CREDIT: 1

This class focuses on the study of differential calculus with limited exposure to the early concepts of integral calculus.
PREREQUISITE: Credit in Precalculus
$\begin{array}{lr}\text { Calculus BC (AP) } & 3617 \\ \text { Calculus BC (TAG-AP) } & 3615 \\ \text { GRADE: } 9-12 & \text { PEIMS: \#A3100102 }\end{array}$
CREDIT: 1
This course covers all the topics of AP Calculus AB, \#3614 together with an extensive study of integral calculus. Original applications of the concepts beyond those covered in class, together with small group investigations, are encouraged.
PREREQUISITE: Credit in Precalculus
Calculus
3624
GRADE: 9-12
PEIMS: \#03102500
CREDIT: 1
Students will extend their experience with functions as they study the fundamental concepts of calculus: limiting behaviors, difference quotients and the derivative, Riemann sums and the definite integral, antiderivatives and indefinite integrals, and the Fundamental Theorem of Calculus. Students review and extend their knowledge of trigonometry and basic analytic geometry.
PREREQUISITE: Credit in Precalculus

| Geometry | 3312 |
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| Geometry (Pre-AP and SPHS/WHS Pre-IB) | 3313 |
| Geometry (TAG Pre-AP and SPHS \& WHS Pre-IB) | 3315 |
| GRADE: $9-12$ | PEIMS: \#03100700 |
| CREDIT: 1 |  |

This course explores the topics of geometry developing an understanding of the structure of a mathematical system connecting definitions, postulates, theorems, logical reasoning, transformations, proof, and coordinate geometry.
PREREQUISITE: Credit in Algebra I
Geometry, Double Block
3311/3310
GRADE: 9-12
PEIMS: \# 03100700/84100012
CREDIT: 1
This course meets every day for one and one-half hours and covers the Geometry TEKS. This "double-block" class requires both courses \#3310 and \#3311.
PREREQUISITE: Credit in Algebra I

| Geometry, Applied Double Block | 9805/9825 |
| :--- | ---: |
| GRADE: $9-12$ |  |$\quad$ PEIMS: \#03100705/84100012

CREDIT: 1
This TEKS based course introduces geometric concepts including identifying angles and two-dimensional shapes. Students will solve everyday problems using geometry. This "double-block" course requires courses, \#9805 and \#9825. (ARD Committee placement)
$\begin{array}{lr}\text { Geometry, A/B Applied (Single Block) } & 9823 \\ \text { GRADE: 9-12 } & \text { PEIMS: \#03100705 }\end{array}$
CREDIT: 1
This TEKS based course introduces geometric concepts including identifying angles and two-dimensional shapes. Students will solve everyday problems using geometry. (ARD Committee placement)

| Math, College Ready | 3649 |
| :---: | :---: |
| GRADE: 12 | PEIMS: \#03102501 |
| CREDIT: 1 |  |
| As part of the Texas Success Initiative (TSI), Texas law requires students entering college to have readines reading and math. Various assessments determine if a student needs reinforcement of specific skills. course will help students to become college ready in mathematics. |  |
| PREREQUISITE: Credit in Algebra I, Geometry, and a 3rd year advanced math course. |  |
| Math Skills I, Algebra I | 9703 |
| GRADE: 9 | PEIMS: \#03100507 |
| Math Skills II, Geometry | 9723 |
| GRADE: 10 | PEIMS: \#03100707 |
| Math Skills III, Math Modeling | 9733 |
| GRADE: 11 | PEIMS: \#03102400 |
| Math Skills IV, Algebra II | 9746 |
| GRADE: 12 | PEIMS: \#03100607 |

GRADE: 12
PEIMS: \#03100607
CREDIT: 1
This course builds on the basic foundations and concepts of mathematics by addressing real-life applications data; change, patterns, measurement, geometry, numbers, and operations. (ARD Committee placement)

## Mathematical Models with Applications <br> 3221 <br> GRADE: 9-12 <br> PEIMS: \# 03102400

CREDIT: 1
This course uses a variety of models in algebra, probability, statistics and geometry, to solve a wide range of real-life applications problems involving money, data, chance, patterns, music, design, and science.
PREREQUISITE: Credit in Algebra I

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Math Modeling, Applied

This course uses a variety of algebra, geometry and graphic models to solve a wide range of real-life applications and problems involving money, data, change, patterns, design and science. (ARD Committee placement)
\(\begin{array}{ll}\text { Precalculus } & 3609\end{array}\)
Precalculus (Pre-AP) 3610
Precalculus (Pre-AP TAG) 3611
Precalculus for Pre-IB Students (TAG) 3613
GRADE: 9-12 PEIMS: \#03101100
CREDIT: 1
In this course, functions, equations, and limits are used as tools for expressing generalizations and as means for analyzing mathematical relationships.
PREREQUISITE: Credit in Geometry and Algebra II
Statistics and Risk Management
GRADE: 11-12
PEIMS: \#13016900
CREDIT: 1
Students will use a variety of graphical and numerical techniques to analyze patterns and departures from patterns to identify and manage risk that could impact an organization. Students will use probability as a tool for anticipating and forecasting data within business models to make decisions. Students will determine the appropriateness of methods used to collect data to ensure conclusions are valid.
PREREQUISITE: Accounting I or Algebra II.```

