MATHEMATICS

COURSE: Algebra Readiness
Grades eligible: 9 – 10
Prerequisite: Placement based upon CST scores
Course Number: 1049
Course Description: This course is designed for students who need additional preparation for Algebra. Students will work towards improvement of basic skills, problem solving, and understanding.
. meets mathematics requirement for MSHS

COURSE: Algebra I
Grades eligible: 9 – 12
Prerequisite: Placed based upon CST scores and/or teacher recommendation
Course Number: 2059 (9th) 2021 (10 – 12)
Course Description: *This course is intended for students pursuing a college preparatory course of study. Topics covered include: operations with rational numbers; properties of real numbers; solving, graphing and writing linear equations and inequalities; systems of linear equations and inequalities; exponents; rational expressions and equations; radicals and connections to Geometry. Students will receive instruction on topics necessary for passing the CAHSEE.*
. meets mathematics requirement for MSHS
.. may be used for CSU or UC entrance

COURSE: Algebra I ELL
Grades eligible: 9 – 12
Prerequisite: Concurrent enrollment in ELD I, II, or III
Course Number: 2034
Course Description: *(same as Algebra I) . . .except students are taught using SDAIE strategies.*
. meets mathematics requirement for MSHS
.. may be used for CSU or UC entrance

COURSE: Geometry
Grades eligible: 9 – 12
Prerequisite: A grade of "C" or better in Algebra I
Course Number: 2041
Course Description: *This course uses Algebra and problem solving. Topics studied include perimeter, area and volume, proofs, congruence, similarity, right triangle, trigonometry, polygons, circles, and three-dimensional figures. This course is intended for students pursuing a college preparatory course of study.*
. meets mathematics graduation requirement for MSHS
.. may be used for CSU or UC entrance

COURSE: Geometry ELL
Grades eligible: 9 – 12
Prerequisite: A grade or "C" or better in Algebra I ELL
Course Number: 2060
Course Description: (same as Geometry) . . . except students are taught using SDAIE strategies
. meets mathematics requirement for MSHS
. . may be used for CSU or UC entrance

COURSE: Algebra II
Grades eligible: 10 – 12
Prerequisite: A grade of "C" *or better in Geometry*
Course Number: 2023
Course Description: *This course studies real and complex number systems. It expands on topics covered in Algebra I. Concepts include linear/quadratic equations, inequalities, polynomials, exponential/logarithmic functions, powers, roots and radicals.*
. meets mathematics requirement for MSHS
.. may be used for CSU or UC entrance

COURSE: Honors Algebra II
Grades eligible: 10 – 12
Prerequisite: A grade of "A" in Geometry and teacher recommendation
Course Number: 2024
Course Description: *This course is an accelerated Algebra II course. The topics include all of those of Algebra II, however, in greater depth and at a faster pace.*
. meets mathematics requirement for MSHS
.. may be used for CSU or UC entrance

COURSE: Trigonometry/Analytic Geometry
Grades eligible: 11 – 12
Prerequisite: A grade of "C" or better in Algebra II or Honors Algebra II
Course Number: 2042
Course Description: *This course is intended for students who wish to study a fourth year of mathematics for college preparation. This course includes the study of circular and trigonometric functions, identities, graphing of trig functions, right and oblique triangles, logarithmic and exponential equations, complex numbers, and conic sections.*
. meets mathematics requirement for MSHS
.. may be used for CSU or UC entrance

COURSE: Pre-calculus
Grades eligible: 11 – 12
Prerequisite: A grade of "B" or better in Honors Algebra II or Trigonometry/Analytic Geometry
Course Number: 2052
Course Description: *This course is an honors level course intended for those students who wish to study calculus as an advanced placement high school course or in college. The course reviews and integrates Algebra and Geometry, studies the concepts and applications of the trigonometric functions, conic sections, vectors, determinants, sequences and series, exponents and logarithms, and introductory calculus.*
. meets the mathematics requirement for MSHS
.. may be used for CSU or UC entrance

COURSE: AP Calculus
Grades eligible: 11 - 12
Prerequisite: A grade of "B" or better in Pre-calculus
Course Number: 2090
Course Description: *This is an advanced placement class that consists of a thorough study of elementary functions and differential and integral calculus of a single variable. Requires a graphing calculator.*
. meets the mathematics requirement for MSHS
.. may be used for CSU or UC entrance

COURSE: AP Statistics
Grades eligible: 11 – 12
Prerequisite: A grade of "B" or better in Algebra II
Course Number: 2091
Course Description: This course is a college level statistics course. It will cover 4 main topics: exploring data, sampling and experimentation, anticipating patterns, and statistical inference with given data through experimentation.
. meets the mathematics requirement for MSHS
…may be used for CSU or UC entrance