## CHFM MATH SEQUENCE

High school math at CHFM is an incremental approach to teaching mathematics. CHFM intends to offer both Algebra I and Algebra II yearly. Geometry and Advanced Math will be offered on an as needed basis from information gathered from annual spring surveys.


#### Abstract

Algebra I (Saxon, Edition) Saxon Algebra I focuses on the essential principles of algebra. Topics include but are not limited to: linear equations, Cartesian coordinate system, introduction to polynomials and quadratics, rational expressions, factoring, introduction to systems of equations, radicals, basic set theory, introduction to function notation, surface area, right prisms and cylinders, pyramids and cones, ratios and proportion, scientific notation, introduction to statistics, Pythagorean theorem and triples, and transformations. Designed for grades 7-10.


Math requirement: Pre-Algebra


#### Abstract

Algebra II (Saxon, Edition ) Saxon Algebra II offers a substantial review of all topics in Algebra I and then moves on to cover these topics at an advanced level. Major topics include the solving and graphing of linear and quadratic equations, factoring, a variety of types of word problems, solving quadratic equations by completing the square, solving simultaneous equations with fractions and decimals, complex roots of quadratic equations, solving systems of nonlinear equations, graphing and solving a system of inequalities, exponential equations, and review of key geometry, probability and statistics topics. Designed for grades 8-11.


Math requirement: Algebra I

## Geometry

Math requirement: Algebra 1 (concurrent enrollment or previously completed)
Advanced Math (Saxon, Edition ) Advanced Mathematics fully integrates topics from algebra, geometry, trigonometry, discrete mathematics, and mathematical analysis. Word problems are developed throughout the problem sets and become progressively more elaborate. With this practice, high-school level students will be able to solve challenging problems such as rate problems and work problems involving abstract quantities. Conceptually oriented problems that help prepare students for college entrance exams (such as the ACT and SAT) are included in the problem sets. Designed for grades 10-12.

## Math requirement: Algebra I \& Algebra II

Calculus Calculus is a condensed summary of key algebra, trigonometry, and analytic geometry topics, students explore limits, functions, and the differentiation and integration of variables. Intended for grades 11-12. CHFM traditionally does not offer Calculus as a class; however, many families choose to take Calculus at a local university for dual high school and college credit.

Math requirement: Algebra I, Algebra II \& Advanced Math (or Trigonometry \& Analysis)

## How To Earn a Full Geometry Credit Without a Separate Geometry Course by Using Saxon

Math... $1 / 3$ credit of Geometry is earned in Saxon Algebra 1 and $1 / 3$ credit of Geometry is earned in Saxon Algebra 2
(must complete all 129 lessons). The remaining $1 / 3$ credit is earned in the first 40 lessons of Saxon Advanced Math.

## Track 1

## 2-year/Tech College Bound



## Track 2

## 4-year College Bound



How To Earn a Full Geometry Credit Without a Separate Geometry Course by Using Saxon Math... $1 / 3$ credit of Geometry is earned in Saxon Algebra 1 and $1 / 3$ credit of Geometry is earned in Saxon Algebra 2 (must complete all 129 lessons). The remaining $1 / 3$ credit is earned in the first 40 lessons of Saxon Advanced Math.

## Advanced

Math
(11-12)

## Track 3

## 4-year College Bound

w/ Mathematics or Engineering Major*


