

211 PRECALCULUS HONORS

COURSE DESCRIPTION

This fast-paced, rigorous course covers both Trigonometry and Pre-Calculus topics and is intended to prepare students for Calculus Honors or AP Calculus. Topics covered will include studies of a variety of functions (including sinusoidal functions), the unit circle, rational expressions with complex fractions, vectors, ellipses and the binomial theorem.

ACADEMIC PLANNING

This course satisfies one of the four mathematics credits required for graduation.

PREREQUISITE: ALGEBRA II; ALGEBRA II HONORS RECOMMENDED

FREQUENCY: SEMESTER/DAILY

STANDARDS: 2.2 Algebraic Concepts – C Functions

- 2.2.HS.C:1–9: Functions
- 2.2.HS.D:1–10: Algebra

UNITS

- Chapter P: Prerequisites
- Chapter 1: Functions and Graphs
- Chapter 2: Polynomial, Power, and Rational Functions
- Chapter 3: Exponential, Logistic, and Logarithmic Functions
- Chapter 4: Trigonometric Functions
- Chapter 5: Analytic Trigonometry
- Chapter 6: Vectors (6.1,6.2)
- Chapter 8: Analytic Geometry in Two and Three Dimensions (8.2 Ellipses)
- Chapter 9: Discrete Mathematics (9.2 Binomial Theorem)

OBJECTIVES

- Independently use their learning to justify their approaches and their steps when solving problems.
- Persevere through solving challenging problems.
- Work cooperatively with peers.
- Make use of structure and repeated reasoning to gain a mathematical perspective and formulate generalized problem solving strategies.
- Apply mathematical knowledge to analyze and model situations/relationships using multiple representations and appropriate tools in order to make decisions, solve problems, and draw conclusions.

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KEY RESOURCES

Savvas Pre-Calculus: Graphical, Numerical, Algebraic and MyLab Math

ASSESSMENTS & GRADING

75% - Tests and Quizzes

15% - Classwork and Homework

10% - Midterm and Final Exams

ATTENDANCE POLICY

Twin Valley School District's attendance policy can be found in the [TVHS Student Handbook](#).

ELECTRONIC DEVICE POLICY

Twin Valley School District's Electronic Device Policy can be found in [School Board Policy 237](#). Additional information can be found in the [TVHS Student Handbook](#).

ACCOMMODATIONS STATEMENT

The Twin Valley School District has a longstanding commitment to the inclusion of students requiring specially-designed instruction within the general education environment to the extent appropriate for the individual child. Twin Valley School District implements a co-teaching model at levels in which general and special education teachers plan and provide instruction within a general education class so that instruction is differentiated to meet the educational needs of all students. These co-taught classes increase learning opportunities and success within the least restrictive environment.

ACADEMIC POLICIES & PROCEDURES

Twin Valley School District values academic integrity. The following information regarding cheating/plagiarism can be found in the [TVHS Student Handbook](#): "Students involved in cheating, plagiarism, and/or unauthorized copying of schoolwork or other educational material will receive no credit for the particular test or assignment, or other actions at the discretion of the teacher. More severe or involved offenses may result in disciplinary actions by the school administration." Additional High School Academic information can be found on their [Program of Studies Website](#).