Grade Level	High School
Class Title	Pre-Calculus
Subject	Pre-Calculus Requirements: Successful completion of both Algebra 3-4 and Geometry.
Class Description	The estimated instructional hours for this class are **5 hours** per week. This class meets the graduation requirement for the State of Washington and the Kennewick School District and meets at least one state standard or state standard in the subject area. This course is a **year-long for 2022-2023.** Students who successfully complete the course have the potential to earn **1.0** credit. Topics covered include: Algebra and Geometry Review, Equations and Inequalities, Graphs and Functions, Polynomial and Rational Functions, Exponential and Logarithmic Functions, Trigonometric Functions, Trigonometric Identities and Equations, and Additional Topics in Trigonometry. *HQT STATEMENT: A team of certificated teachers who are highly qualified in this subject matter has reviewed this WSLP. Weekly meetings with the HQ teacher are required.
Learning Materials	Computer with internet connection and Aleks Pre-Calculus course. Keeping a notebook of study sheets is helpful during the course.

Learning Goals/Performance Objectives	Students will be able understand and successfully complete problems in the following areas.
	
	Algebra and Geometry Review
	   Real Numbers and Algebraic Expressions
	   Exponents
	   Polynomial Expressions
	   Factoring Polynomials
	   Rational Expressions
	   Perfect Squares and nth Roots
	   Rational Exponents
	   Radical Expressions
	   Geometry
	
	Equations and Inequalities
	   Linear Equations and Applications
	   Absolute Value Equations
	   Linear Inequalities and Applications
	   Rational Equations that Simplify to Linear
	   Complex Numbers
	   Quadratic Equations
	   Rational Equations that Simplify to Quadratic
	   Radical Equations

Graphs and Functions
   The Coordinate Plane, Distance, and Midpoint
   Graphs of Equations
   Slope and Equations of Lines
   Linear Applications
   Circles
   Functions
   Graphs of Functions
   Transformations
   Combining Functions; Composite Functions; Inverse Functions

Polynomial and Rational Functions
   Quadratic Functions
   Polynomial Functions
   Division of Polynomials; Remainder and Factor Theorems
   Real Zeros of Polynomial Functions
   Complex Zeros of Polynomials Functions
   Rational Functions
   Polynomial and Rational Inequalities

Exponential and Logarithmic Functions
   Graphing Exponential Functions
   Applications of Exponential Functions
   Logarithmic Functions
   Properties of Logarithms
   Logarithmic and Exponential Equations
   Applications

Trigonometric Functions
   Angles and Their Measure
   The Unit Circle and Evaluating Trigonometric Functions
   Right Triangle Trigonometry
   Trigonometric Functions of Angles
   Graphs of Sine and Cosine Functions
   Graphs of Other Trigonometric Functions
   Inverse Trigonometric Functions

Trigonometric Identities and Equations
   Verifying Trigonometric Identities
   Sum and Difference Formulas
   Double-Angle, Half-Angle, Product-to-Sum, and Power Reducing Formulas
   Trigonometric Equations

Additional Topics in Trigonometry
Laws of Sines and Cosines

This course meets graduation requirements and is part of their profile of navigation and planning for graduation. Course work is aligned with the standards of the course topic through national and local curriculum of best practices.

Learning Activities	Students will complete Aleks activities and performance assessments.

Progress Criteria/Methods of Evaluation	Students will meet monthly with the HQ teacher. Monthly Progress will be marked satisfactory or unsatisfactory based on the progress of the topics completed. Final grades will be taken from the number of topics completed for the course.
	    50% - S for Pre-Calculus 1
	    62% - A for Pre-Calculus 1
	    78% - A for Pre-Calculus 1 and S for Pre-Calculus 2
	    86% - A for Pre-Calculus 1 and B for Pre-Calculus 2
	    97% - A for Pre-Calculus 1 and A or Pre-Calculus 2

Cedars Codes:	High School: 2401 / 2401