Learning Plan Document for Course Description and WINGS

Grade Level	High School
Class Title	Algebra 3-4
Subject	Second Year Algebra
Class Description	Requirements: Successful completion of Algebra 1-2. Topics covered are finite numbers, linear functions and systems, quadratic functions, higher order polynomial functions, rational functions, radical functions, exponential functions, probability and statistics. Curriculum enables students to prepare for college entrance exams. This course is a prerequisite for Pre-Calculus. This class meets the graduation requirement for the State of Washington and Kennewick School District and meets at least one state standards. This course is a yearlong course for the 2022-2023. Students who successfully complete the course have the potential to earn .5/1.0 credit.
Learning Materials	Off-site course work can use the district adopted textbook and materials or may be an Aleks on-line course. On-line courses are a complete curriculum of themselves. A computer and working internet connection is needed on a regular basis.
Learning Goals/Performance Objectives	The content is based on the National Curriculum area of Mathematics: Teachers Association and is aligned to state standards. A2.1. Core Content: Solving problems The first core content area highlights the type of problems students will be able to solve by the end of Algebra 2, as they extend their ability to solve problems with additional functions and equations. When presented with a word problem, students are able to determine which function or equation models the problem and use that information to solve the problem. They build on what they learned in Algebra 1 about linear and quadratic functions and are able to solve more complex problems. Additionally, students learn to solve problems modeled by exponential and logarithmic functions, systems of equations and inequalities, inverse variations, and combinations and permutations. Turning word problems into equations that can be solved is a skill student's hone throughout Algebra 2 and subsequent mathematics courses. A2.2. Core Content: Numbers, expressions, and operations (Numbers, Operations, Algebra) Students extend their understanding of number systems to include complex numbers, which they will see as solutions for quadratic equations. They grow more proficient in their use of algebraic techniques as they continue to use variables and expressions to solve problems. As problems become more sophisticated and the level of mathematics increases, so does the complexity of the symbolic manipulations and computations necessary to

	solve the problems. Students refine the foundational algebraic skills they need to be successful in subsequent mathematics courses. A2.6. Core Content: Probability, data, and distributions (Data/Statistics/Probability) Students formalize their study of probability, computing both combinations and permutations to calculate the likelihood of an outcome in uncertain circumstances and applying the binominal theorem to solve problems. They extend their use of statistics to graph bivariate data and analyze its shape to make predictions. They calculate and interpret measures of variability, confidence intervals, and margins of error for population proportions. Dual goals underlie the content in the section: students prepare for the further study of statistics and become thoughtful consumers of data. A team of certificated teachers who are highly qualified in this subject matter has reviewed this WSLP.
Learning Activities	On line courses have a variety of resources to use as reference materials, print out if needed and work monthly with the highly qualified teacher
Progress Criteria/Methods of Evaluation	Monthly assessments will be completed by the consultant/certified teacher. Monthly Progress will be marked satisfactory or unsatisfactory based on the professional judgment of the certified teacher using parent input, work samples, and monthly assessments for off-site work. Final Grading: Course grades are <u>weighted towards summative tests in the courses.</u> 90-100 A [93-100=4.0, 90-92=3.7] 89-80 B [B+ 87-89=3.3, B 83-86 = 3.0, B- 80-82=2.7] 79-70 C [C+ 77-79=2.3, C 73-76=2.0 C-70-72=1.7] 60-69 D [D+ 67-69 D 60-66] Online courses for a proficient passing grade may vary according to course completion. Your APEX/Aleks and off site HQ will work to establish norms per on line product.