



Mrs. Harris
 Advanced Algebra A
 Room: B103
 Office Hours 7:30am -8:20 am

Phone: (503)673-7815 ext 4893
 E-mail: harris1@wlwv.k12.or.us
<http://www.wlhs.wlvv.k12.or.us/Page/3496>

Course Description: This course provides exploration of algebraic concepts and processes while covering the basic topics of an Algebra 2 curriculum. These topics include number systems, solving linear equations, problem solving strategies, solving systems of equations, probability and statistics, and factoring and solving quadratic equations.

Major Units:

Topic 11 Statistics	Topic 12 Probability
Topic 1 Solving Equations and Inequalities	Topic 7 Polynomials and Factoring
Topic 2 Linear Equations	Topic 8 Quadratic Functions
Topic 3 Linear Functions	Topic 9 Solving Quadratic Functions
Topic 4 Systems of Linear Equations and Inequalities	

Learning Objectives: In this course you will learn about functions, (linear and quadratic) their graphs and transformations involving their graphs. You will learn methods for solving equations and systems; matrices and their operations and applications as well as an introduction to probability and statistics.

Learning Goals: Upon completion of this course, students will be able to

- Interpret the structure of expressions
- Write expressions in equivalent forms to solve problems
- Perform arithmetic operations on polynomials
- Understand the relationship between zeros and factors of polynomials
- Create equations that describe numbers or relationships
- Solve equations and inequalities in one variable
- Solve systems of equations
- Represent and solve equations and inequalities graphically
- Understand the concept of a function and use functions notation
- Extend the properties of exponents to rational exponents
- Classify numbers as rational or irrational
- Summarize, represent, and interpret data on a single count or measurement variable
- Summarize, represent, and interpret data on two categorical and quantitative variables
- Interpret linear models
- Understand and evaluate random processes underlying statistical experiments
- Make inferences and justify conclusions from sample surveys, experiments and observational studies
- Understand independence and conditional probability and use them to interpret data
- Use the rules of probability to compute probabilities of compound events in a uniform probability model
- Calculate expected values and use them to solve problems
- Use probability to evaluate outcomes of decisions

Standards of Mathematical Practice:

The student will:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make sense of structure.
- Look for and express regularity in repeated reasoning.

All math courses are designed to meet the requirements of the WLWV Mathematics Curriculum and the Common Core State Standards.

Required Materials:

- Loose leaf paper
- Pencils
- Red pen, for grading
- Calculator TI-36

Classroom Rules and Expectations:

In general, be respectful, and come ready to work. That includes bringing all necessary materials to class; book, homework, calculator, and appropriate writing utensils. Treat others with the courtesy due everyone as a person. Be on time, silence your cell phone and have it put away at the start of class. Keep ear buds out of sight; there will be times that I don't mind listening to music but for the most part it is not necessary and is very distracting. I expect that while you are in my room you are working on your math. Cheating is not tolerated. This includes if you let someone "borrow" the homework you have already completed. Please, no gum.

Assessment and Grading Policies:

- ❖ Tests and Quizzes (65%) (Test 40% and Quiz 25%)

If you have an excused absence you will be able to make up the test in a timely manner. There will be no test retakes. Missing a review day does **not** postpone a chapter test. However, if you contact me before the test day, we can make other arrangements.

- ❖ Daily Work/ Homework(25%)

If homework is not done when you enter the class it is considered late. Late work will be accepted for half credit before you take the chapter test.

- Work must be neat and complete for credit.
- If you are absent due to illness or family emergency you have one day to make-up the assignment after the one day the assignment is considered late and you will earn only half credit.

- ❖ Final Exam (10%)

A	90 and above
B	80.0-89.9
C	70.-79.9
D	60.0-69.9
F	0-59.9

Grades are updated online approximately every two weeks, they are most accurate after the grade for the latest test is recorded.