

Miss Gilman Advanced Algebra B

**Room:** A206

Phone: (503) 673-7815 ext 4885 E-mail: gilmanj@wlwv.k12.or.us Office Hours T W 2:15 pm - 3:30 pm

or by appointment

## **Course Description**

In this course, students will build on their work with functions including a quick review of linear and quadratic functions. We continue with higher order polynomials, exponential, logarithmic, rational, and trigonometric functions. The course concludes with a study of series and sequences. Technology will be utilized throughout the course to facilitate learning.

# **Major Units**

Polynomials

n<sup>th</sup> Roots and Rational Exponents Exponential and Logarithmic Functions

**Rational Functions** 

Probability

Data Analysis and Statistics Series and Sequences

Trigonometry

# **Learning Goals and objectives**

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

- Extend properties of exponents to rational exponents
- Classify numbers as rational or irrational
- Perform arithmetic operations on polynomials
- Understand that polynomials form a system closed under the operations of addition, subtraction and multiplication
- Factor and solve polynomial equations and find their roots
- Rewrite simple rational expressions in various forms using inspection, synthetic division or long division
- Apply rules of exponents and logarithms to convert expressions or solve equations
- Understand and apply the fundamental counting principal, combinations, permutations and probability
- Calculate expected values and use them to solve problems
- Use probability to evaluate outcomes of decisions
- Utilize special right triangle relationships as well as trigonometric ratios to solve triangles
- Convert between degree measure and radian measure and find arc length of sectors

### **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:**

### TI-83 or TI-84 Graphing Calculator

One 3-ring Binder
Spiral Notebook for Adv Algebra ONLY
(continued from Semester 1)

Notebook Paper and Graph Paper

# **Computer with Internet Access**

Pencils

At least ONE red, green or purple pen

Highlighters

#### **Classroom Rules and Expectations:**

All guidelines and rules of West Linn High School will be followed.

- **Be On Time.** Respect our time together and use it wisely.
- Come to class prepared. Bring your supplies to class each day.
- **Respect the speaker.** This includes your classmates, guests, and Miss Gilman.
- Act Responsibly. Both inside and outside of the classroom.
- **Help Others Learn.** Give sincere assistance, and do your best to not distract others.

\*Put your phones away during class meetings for CDL. We will utilize a variety of technology throughout the course, just not social media.

Consequences of not meeting classroom expectations:

- I. Discuss the behavior with the student (verbal warning).
- II. Conference with the student (group change/incident report/ parent contact)
- III. Conference with the student (behavioral plan/ parent contact/ parent conference)
- IV. Referral to administration (referrals will be issued for incidents that place others in danger.)

### **Homework/Classwork Expectations:**

Each student will be expected to complete all assignments. Each assignment has been specifically designed to increase the opportunity for each student to be successful in this course. Student work is expected to be neat and organized. Students must complete all assignments in pencil. Homework will be submitted through Google Classroom. Students will take daily notes and will submit copies of their Spiral Notebooks weekly for Classwork points.

## **Grading Policy:**

Students will be offered opportunities to demonstrate their understanding of the content each week. Students are given tests/quizzes on each chapter as well as one cumulative final each semester. Cheating will not be tolerated. Students will complete their own work; no test or quiz is worth compromising our character. Graded student tests and quizzes are not to be shared with other students.

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Grading Cutoffs:		Grading Breakdown:	Grading Breakdown:	
A:	90 and above	Tests	45%	
B:	80 to 89.9	Quizzes/Classwork	20%	
C:	70 to 79.9	Final Exam	20%	
D:	60 to 69.9	Homework	15%	
F:	59.9 and below			

Grades will not be rounded up. Homework must be submitted to Google Classroom on time for full credit. No extra credit.

# Policy for Students with D's or F's:

Students who are earning a grade of a D or an F at any time throughout the semester, will be expected to attend office hours with Miss Gilman at least two times per week until work has been completed/quizzes have been retaken to bring up his/her grade.

### **Makeup Policy and Long Term Project Policy:**

- Make-ups will only be permitted for excused absences, and must be arranged the first day back.
- Make up assignments for excused absences will be submitted the day after return to class to receive full credit. \*for an extended absence other arrangements will be made.
- Make up Quizzes must be taken the day you return to class unless previously arranged.
- Makeup tests must be taken within two weeks from the original test date.

## **Excused and Un-excused Absences:**

Parents must contact the WLHS attendance office to excuse an absence.

Un-excused absences will result in loss of points for the day and assignments cannot be made up for credit.

#### **Extra Assistance Information:**

**Students:** If you need extra help, please make an appointment with Miss Gilman as soon as possible.

**Parents/Guardians:** If you have any questions or concerns, please feel free to contact me via email. Thank you for your time and support.

<sup>\*</sup>Content contained in this syllabus is subject to changes. Content is specific to CDL environment