

## Honors Algebra 2 2023-2024

### Instructor Information:

Teacher	Room	Email	Availability
Alvarez	129	Je.Alvarezgonzalez@WashoeSchools.net	By appointment
Kretsch	222	Katrina.Kretsch@WashoeSchools.net	By appointment
Sperske	E270	Anneliese.Sperske@WashoeSchools.net	By appointment
Marshall	E270	Katherine.Marshall@washoeschools.net	By appointment
Havel	E272	Shavel@washoeschools.net	By appointment
Wisecarver	119	HWisecarver@Washoeschools.net	By appointment

### Course Description:

Course#:	*2227-2228
Grade:	9-12
Credit:	1 Honors Credit (.025 added to GPA upon completion)
Fee:	\$3 consumable materials fee. A graphing calculator is required for this course.

This is a one-year course, which strengthens and expands the techniques and concepts learned in first-year algebra. This rigorous course will strengthen the student's problem solving and algebraic skills in preparation for advanced mathematics courses, and will introduce some trigonometric topics. The major topics of study are: function and relation families (quadratic, polynomial, exponential, logarithmic, exponential, radical, and rational); systems of equations and inequalities; irrational and complex numbers; sequences and series; trigonometric foundational concepts, and elements of probability and statistics. Throughout the year, students will be expected to continue to develop the ability to reason and communicate mathematically, apply learned concepts to new problem-solving situations, and exhibit increased confidence in their ability to solve mathematical problems. The Math Department recommends that students take this course if they received As or Bs in Formal Geometry, or if the student received all As in both Algebra 1 and Geometry.

\* Credit in these courses applies toward an honors diploma.

### Course Pre/Co-requisites:

Successful completion or current enrollment in Formal Geometry or teacher recommendation.

Students can take Algebra 2 Honors and Formal Geometry concurrently in order to take Calculus in high school. Students may take Alg 2 Honors and AP Statistics concurrently.

### Required texts, course materials:

- Binder
- Lined paper or spiral notebook for notes and homework

- Graph paper
- Pencils, highlighters, and pens
  
- Graphing Calculator:
  - You will need a graphing calculator for this class, and I recommend the TI-84 (plus, silver, color etc are fine.) These cost approximately \$110. You can also rent a graphing calculator from the math department for an annual cost of \$30. Another option is to check online (Craig's List, Amazon, etc... for a used TI-84). There are also free apps and graphing calculators online, however, you will not be able to use smartphones on tests or quizzes. You will have access to the class set of calculators only during class.
  
- Lab Fee: There is a \$3.00 lab fee for this course. Please pay your lab fee to the bookkeeper, and then bring me your receipt. (Note: students who cannot afford this lab fee should speak to me in private, and this fee will be waived.)

### Unique class procedures /structures:

Current and past materials are available on the math website [www.washoeschools.net/drhsmath](http://www.washoeschools.net/drhsmath) under the Honors Algebra 2 tab.

These include: blank notes, filled out notes, homework, practice test, and answers for the practice test.

Students are expected to be on time to class (seated when the bell rings), and to attend class on a regular basis. Students who miss class will miss crucial information that will be assessed on tests and quizzes. Students are encouraged not to miss class.

### Student Learning Outcomes:

*Standards to be learned:*

- SLO1. Students will be able to graph functions using transformations and identify key features.
  
- SLO2. Students will be able to perform arithmetic operations on complex numbers, polynomial expressions, rational expressions and other functions.
  
- SLO3. Students will be able to interpret and analyze expressions for functions in terms of the situation they model.
  
- SLO4. Students will be able to represent and solve equations and inequalities graphically and algebraically.
  
- SLO5. Students will be able to understand the relationship between zeros and factors

## Course Requirements:

Type	%	Policy
Assignments  Note: All assignments must be done in pencil.	10%	<p><b>Homework</b> (Practice Problems) assignments will be scored by accuracy, with each problem worth one point if done correctly.</p> <p>Students must attempt every problem, with work shown, in order to receive on-time credit. Students who miss questions can earn credit on those problems by doing corrections with work shown. Corrections must be done in pen.</p> <p>Late assignments will be worth half credit and <b>MUST</b> be turned in by the start of the test for that unit in order to receive any credit.</p> <p>Students are given a calendar with the homework assignments for the entire unit including the answers.</p> <p><b>Students who do all assignments for each semester will earn an extra 2% for their final grade.</b></p>
Participation	5%	<p><b>Participation</b> in class will consist primarily of putting up solutions from problems on the board. This could include homework questions or other problems during class. A participation grade will be kept for each unit.</p>
Quizzes	15%	<p><b>Quizzes</b> may or may not be announced. Expect daily quizzes on a regular basis. Quizzes could be worth anywhere from 3 to 50 points. The unit test can replace the lowest quiz score.</p>
Assessments	55%	<p><b>Tests</b> will always be announced in advance. There will be 4 or 5 unit tests each semester. The <b>final exam</b> will replace the student's lowest test score if such a score exists.</p> <p>Students may retake tests if the student has first completed any missing assignments for the unit, as well as test corrections. The first test retake will fully replace the original score. Each additional retake will be averaged with the original test score.</p>
Final Exam	15%	<p>A final <b>exam</b> will be given at the end of the semester. Students will receive a practice final prior to this exam.</p>

## Grading Criteria, Scale, and Standards:

### DRHS/WCSD grading scale:

- A: 90% - 100%
- B: 80% - 89.9%
- C: 70% - 79.9%
- D: 60% - 69.9%
- F: <59.9%

### Make-Up Work

- If a student is absent, they should go to the website [www.washoeschools.net/drhs](http://www.washoeschools.net/drhs) and look under the Honors Algebra 2 tab to get the notes that they missed.
- If a student is absent, they should go to the website [www.washoeschools.net/drhs](http://www.washoeschools.net/drhs) in order to find the YouTube link for our class. Absent students should watch the video over the missed lesson before returning to class, if at all possible.
- It is the responsibility of the student to do make-up work after returning from an absence and return the completed work within the designated deadline.
- Students are provided the length of the absence plus one day to complete any make-up work assigned. For example, if the student was absent for four days he/she will have five days to complete and submit the make-up work.
- Students who do not request or return completed make-up work will not earn credit on missed assignments.
- Make-up work need not be identical or equivalent to that missed due to the absence but will ensure that the student has the opportunity to meet the academic standards.
- Previously assigned work that was due on the day the student was absent is NOT considered makeup work and is due the day the student returns to school.

### Late Work

All late work is due by the day of the current unit test and will not be accepted after that date. All late work is worth half credit. Assignments must be fully attempted, with work shown for every problem, in order to be graded.

### Test Re-Takes

Students may retake one test per semester in order to improve their grades and master the material. In order to retake tests,

- The practice test must be completely done with work shown.
- All homework for the unit must be turned in.
- Every problem must be attempted on the original test.
- Students must do test corrections from the original test.

## Course Calendar or Topics Outline:

### **Semester 1 Topics**

Linear Functions and Systems; Quadratic Functions and Equations; Polynomial Functions; Matrices; Semester Review and Final Exam

### **Semester 2 Topics**

Rational Exponents and Radical Functions; Exponential and Logarithmic Functions; Trigonometric Functions; Rational Functions; Semester Review and Final Exam

## Damonte Ranch High School/WCSD Policies

### Academic Integrity Policy:

Cheating means gaining unfair advantage by using unauthorized information.

Cheating is further defined by but not limited to:

- **COPYING** someone else’s homework, classwork, or test answers
- **ALLOWING** someone else to copy your work or test answers
- **USING** any kind of unauthorized device, study aid, or cheat sheet
- **POSSESSING** or **VIEWING** a copy of an exam beforehand
- **SHARING** test information with students who have not yet taken the test or course
  - o This includes taking answers/questions from a test out of the classroom without the permission of the teacher.
- **CHANGING** your answers or someone else’s when correcting in class
- **MISREPRESENTING** work done by others as your own work.

Plagiarism is presenting the words or ideas of another person as one’s own without citing sources.

- **YOU ARE PLAGIARIZING** when you copy a phrase, a paragraph, a page or an entire paper.
- **YOU ARE PLAGIARIZING** when you copy from a published source, i.e. Internet or print.
- **YOU ARE PLAGIARIZING** when you copy from someone else’s work.

Minimum consequences for cheating are as follows:

- **REFERRAL** to Student Services
- **PARENT CONTACT** by the teacher
- **LUNCH DETENTION** with Student Services
- **NOTATION** made in school discipline record

Additional consequences may include, but are not limited to, the following:

- Student will receive a **ZERO** on the test or homework assignment
- Student will receive an **“F”** in citizenship for the quarter and depending on the severity of the infraction may receive an **“F”** in citizenship for the semester
- Alternative assignment, to be determined by the teacher

Be Responsible. Make Wise Choices. If you are unsure, ask your teacher for guidance.

“I have read the Algebra 2H Syllabus, and the Damonte Ranch High School Academic Integrity Policy.”

Student’s Name (printed): \_\_\_\_\_

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent/Guardian Signature

\_\_\_\_\_  
Date