

MVLA
2019-2020
COURSE INFORMATION SHEET

Course Title: Algebra 2

School: MVHS

UC/CSU requirement: Yes

Instructors: Reid, Dunbar, & Alvarez

Textbook and/or other learning resources: Core Connections Algebra 2, College Preparatory Mathematics (CPM)

Student Learning Outcomes:

Algebra II expands and develops the study of the topics learned in Algebra 1. New topics covered include sequences and series, complex numbers, logarithmic, exponential and polynomial functions. Students are also introduced to conic sections and systems of equations involving more than two variables.

Key concepts addressed in this course are:

- Visualize, express, interpret and describe, and graph functions (and their inverses, in many cases). Given a graph, students will be able to represent the function with an equation, and vice-versa, and transform the graph, including the following function families:
 - absolute value
 - exponential
 - linear
 - logarithmic
 - piecewise-defined
 - polynomial
 - quadratic
 - square root
 - rational
 - trigonometric
- Use of variables and functions to represent relationships given in tables, graphs, situations, and geometric diagrams, and recognize the connections among these multiple representations.
- Application of multiple algebraic representations to model and solve problems presented as real world situations or simulations.
- Solving linear or quadratic equations in one variable, systems of equations in two variables, and linear systems of equations in three or more variables, including solving with graphical methods.
- Use of algebra to rewrite complicated algebraic expressions and equations in more useful forms.
- Rewriting rational expressions and arithmetic operations on polynomials.
- The relationship between zeros and factors of polynomials.
- Operations with complex numbers, and solving quadratic equations with complex solutions.
- Modeling periodic phenomena with trigonometric functions.
- Solving trigonometric equations and proving trigonometric identities.
- Calculating the sums of arithmetic and geometric series, including infinite geometric series.
- Concepts of randomness and bias in survey design and interpretation of the results.
- Use of a normal distribution to model outcomes and to make inferences as appropriate.
- Use of computers to simulate and determine complex probabilities.
- Use of margin of error and sample-to-sample variability to evaluate statistical decisions.
- Understand logarithms and their inverse relationship with exponentials.
- Use logarithms to solve exponential equations.

Assessment and Grading ([BP 5121](#) / [AR 5121](#)): To ensure that every student has an equal opportunity to demonstrate their learning, the course instructors implement aligned grading practices and common assessments with the same frequency.

1. Grading categories and their percentage weights:

Exams- 70%
Quizzes- 15%
Homework/Classwork/Notebook- 15%

2. Achievement evidence collected within each grading category:

Exams consists of 3-5 equally weighted cumulative exams, which includes the final.

Cumulative tests will be spaced approximately evenly and may include all material covered in the class to that point.

The questions from earlier tests will emphasize the key standards of the earlier chapters.

Quizzes will occur 1-3 times per unit.

Homework/Classwork/Notebook- Homework will be assigned on most days and checked for completion, due before a cumulative test. On time Homework will receive full credit (5 points). Classwork and notes may also be checked for credit and entered into the gradebook.

3. Grading scales:

90-100%	A	
80-89.99%	B	The lowest any category percentage can be is 50%
70-79.99%	C	
60-69.99%	D	There is no rounding of grades.
50-59.99%	F	

4. Homework/outside of class practices ([AR 6154](#)):

Homework will be assigned most days in accordance with the district HW policy.

Complete assignments will receive full credit when checked in class, up to the day before a test.

5. Excused absence make up practices ([Education Code 48205\(b\)](#)):

Students missing the day of a test or quiz should arrange to take the test or quiz prior to missing class. For unexpected absences, students will make up the test or quiz the day of returning.

6. Academic integrity violation practices [MVHS Academic Integrity Policy](#)

Honesty, trust, and integrity are vital components of the education process. The Governing Board believes that academic honesty and personal integrity are fundamental components of a student's education and character development. The Board expects that students will not cheat, lie, plagiarize or commit other acts of academic dishonesty. There are three categories for violations of academic integrity based on the severity of the offense (Categories A, B, and C). Examples of academic integrity violations include, but are not limited to, copying homework, allowing someone else to copy your work, plagiarism (taking or passing off another's ideas as one's own, including using Internet sources without documentation), copying from another's exam, improperly obtaining and/or using tests, and using unauthorized notes/materials. Check with your teachers if you are unsure of their expectations.

A student's education and integrity are extraordinarily valuable. Thus, students are expected to do their own work. If a student is concerned that they may not be able to complete their own work, they should consult their teacher for assistance. Student or parents/guardians who are unclear about what constitutes cheating should consult the instructor and the district Academic Integrity policy posted on the instructor's website. District policy regarding cheating will be followed at all times.

7. **Late work practices:**

Assignments from a given unit can be turned in for partial credit until the test for the unit.

Missed tests and quizzes will be made up by using the score of the following test.

8. **Revision practices:**

The cumulative tests will give students an opportunity to demonstrate improved understanding and improve their grade.

A cumulative test grade will replace a previous cumulative test grade if the new score is better. Quizzes from the unit of a given cumulative test can also be replaced by an improved cumulative test score. Students are responsible for monitoring their scores and notifying the teacher of any improvement.

9. Extra credit practices:

No extra credit will be offered in this course.

Instructors' email addresses:

juan.alvarez@mvla.net

jyoti.reid@mvla.net

bill.dunbar@mvla.net