

**Algebra 2**  
**2017-2018**  
**MISS WEINSTEIN**

**COURSE DESCRIPTION**

Algebra II is the third course of the college preparatory sequence. It is designed to provide a more in-depth analysis of the real world system and extend the process of algebra introduced in the Algebra 1 course. Topics included are; mathematical models, functions, permutations and combinations, linear functions, equations and inequalities, system of linear equations and inequalities, quadratic equations and functions, roots and powers, irrational and complex numbers, polynomials and polynomial functions, exponential functions, logarithmic functions and conic sections.

**COURSE BENCHMARKS**

1. The student will be able to demonstrate number sense for real numbers and algebraic expressions in a variety of situations.
2. The student will be able to evaluate and analyze functions using various methods including mental math, paper and pencil, concrete objects, and graphing utilities or other appropriate technology.
3. The student will be able to explain the relationship between the solution(s) to systems of equations/inequalities in two unknowns and their corresponding graphs.
4. The student will be able to add, subtract, and multiply matrices, be able to organize data into matrices, find and use inverse matrices, and be able to solve matrix equations.
5. The student will be able to identify arithmetic and geometric sequences and series as well as recursion and special sequences.
6. The student will be able to apply probability theory to draw conclusions, generate convincing arguments, make predictions and decisions by collecting, organizing and interpreting numerical and non-numerical data sets. Students will also be able to analyze decisions including the use of concrete objects in a variety of situation.
7. The student will be able to perform fundamental operations with polynomials and then apply this knowledge to find the zeros of polynomial functions and rational functions.
8. The student will be able to graph and find the zeros of quadratic functions.
9. The student will be able to solve problems involving direct, inverse, and joint variation. Students will also be able to find the composition of two functions and be able to solve higher order polynomial equations.
10. The student will be able to extend the meaning of exponents to include rational numbers, to define logarithmic functions and to learn how they are related to exponential functions.

## **ALGEBRA II | MISS WEINSTEIN GRADING POLICY & EXPECTATIONS FOR 2017 - 2018**

**Welcome to Algebra 2! Listed below are the criteria that I will follow to determine your marking period grade.**

### **TEST & QUIZ AVERAGE...70%**

- The test & quiz average will be composed of class quizzes, tests, projects, and cumulative assessments.
- Tests will always be announced.
- Quizzes may be given at any time they are worth half a test grade.
- If you are absent the day before a test or quiz you are required to take the test or quiz on the scheduled day with the class.
- If you are absent the day of a test or quiz you are required to take the test or quiz on the day that you return to school after school in the testing center (A or B day does not matter – you will have a maximum of 3 school days).
- If you are absent for the review and the review packet is not posted on my wiki page you must take a make-up test within one day of your return to school. If the review was posted on the wiki, then you must take the test with the class.
- TESTS AND QUIZZES NOT MADE UP IN THE ALLOTTED TIME WILL RECEIVE A GRADE OF 0%. (Maximum of 3 school days to make up a missing test or quiz)

### **HOMEWORK & CLASSWORK AVERAGE...20%**

- Homework / classwork is graded on a scale of 0-10 and is assigned and checked daily.
- All work must be shown to receive full credit.
- If you miss class due to being sick, a field trip, signing in late, leaving early, going to guidance or the nurse's office, or for any other school-related reason, it is your responsibility to check my wiki page for the material missed. You must be prepared for class upon your return.
- Homework can be handed in one day late for half credit all work must be shown!! See form for submitting late assignments. The only assignments that will not be accepted late is a review for a test or quiz.

### **CLASS PARTICIPATION...10%**

- Participation will be graded on a bi-weekly scale of 0-100%.
- Be prepared for class everyday with your student ID, textbook (on the iPad), notebook/binder, pencil, eraser, and calculator.
- Be a participant not an observer.
- Be on time and ready to work when the bell rings. (Meaning in your seat, not entering the room or standing around the classroom.)

### **CLASSROOM CONDUCT**

- Please respect your teachers and classmates by remaining silent until he or she is finished speaking.
- Please raise your hand and wait to be called upon for questions or comments.
- At the beginning of every class there will be a warm-up so please sit down, take out your homework from the previous night so that it can be checked, and complete the warm-up.
- Cell phone and iPod usage is prohibited, if I see them, I will take them.
- iPads should remain in your bag unless you are asked to take them out.

### **EXTRA HELP**

- You can go to CMAC in Room G303, Monday-Thursday, from 2:15 – 3:15 for extra help. NHS tutors are available in the media center, Monday-Thursday. I am also available after school for extra help. Please check with me during class to make arrangements.

### **WIKI**

- Assignments and announcements can be found on my wiki: [www.missweinstein.pbworks.com](http://www.missweinstein.pbworks.com)

### **IPad Usage**

- By no means are you allowed to record, video tape or take pictures of the teacher or any student in class without permission.
- iPads are used for educational purposes only; any misuse of iPads in class will result in loss of iPad privileges in the classroom and subject to disciplinary actions.
- You may not take pictures of the board to copy down a problem unless I specify you can. Math is transferred not by a picture but by doing.

*Please sign below showing that you have read and understand the grading policy as well as the course description & benchmarks.*

\_\_\_\_\_  
(Student's printed name)

\_\_\_\_\_  
(Student's signature)

\_\_\_\_\_  
(Parent's / Guardian's signature)