

# Algebra 2

Periods 1, 2, 3, 5, 6, 7  
Room #230

Mrs. Maria Fernandez  
mfernandez@materlakes.org

## Course Description:

The purpose of this course is to continue the study of algebra and to provide the foundation for applying algebraic skills to other mathematical and scientific fields. Students will work with linear, quadratic, exponential and logarithmic functions, including polynomial, rational, and radical functions. Students will see how the visual displays and summary statistics they learned in earlier grades relate to different types of data and to probability distributions. They will use probability to make informed decisions. Student will expand his/her knowledge in Geometry using the coordinate plane to extend trigonometry to model periodic phenomena. Moreover, students will work with trigonometric identities and equations.

## Textbook:

*Algebra 2 (Author: Glencoe & Al., Publisher: Glencoe, McGraw-Hill 2018)*

## Units of Study:

- Chapter 1: Linear Equations
- Chapter 2: Relations and Functions
- Chapter 3: Quadratic Functions
- Chapter 4: Polynomials and Polynomial Functions
- Chapter 5: Inverses and Radical Functions
- Chapter 6: Exponential and Logarithmic Functions
- Chapter 7: Rational Functions
- Chapter 8: Statistics and Probability
- Chapter 9: Trigonometric Functions
- Chapter 10: Trigonometric Identities and Equations

## Classroom Rules and Expectations:

### Rules:

- Be prompt
- Be prepared
- Be positive
- Be productive
- Be polite
- Be honest

### Expectations:

- Promote a good work environment.
- Respect yourself, others, and your school.
- Maintain reasonable standards of academic performance commensurate with their ability.

### Late Work:

Late submissions of any homework or assignment will be half credit after 72 hours from the due date.

## Classroom Materials:

- Agenda (if needed)
- Composition notebook without rings
- 2" 3-ring Binder
- 2 Packs of Notebook Paper (college ruled) of 150 sheets each
- 5 Dividers
- Sheet Protectors
- Pencil
- Blue and red pens
- Non-colored rubber
- Ruler
- Highlighters

## Binder:

You are **required** to have a 3-ring binder in which to neatly organize each lesson's notes and homework. Some notes will be taken on loose leaf paper and some on printed handouts depending on the lesson's material. Having complete notes and all assignments for each lesson is required for a perfect binder, even when absent.

Your 3-ring binder should be divided into **5** sections and labeled as follows:

- Special Forms
- Notes/Classwork
- Homework
- Study guides

<ul style="list-style-type: none"> <li>Scientific Calculator (DO NOT PURCHASE UNTIL INSTRUCTED BY TEACHER)</li> </ul> <p>Graphing Calculators ARE NOT allowed for this course.</p> <p><b>Cheating:</b> By cheating the student is losing the most valuable asset that he/she has: his/her honor. Don't play on it, it's not a game! If the teacher has some suspicion that some student has copied, he/she will have a zero in the homework or in the exam</p> <p><b>Hall passes:</b> Students should arrive to school with no need to go to the bathrooms. If needed, he/she has lunch time for going to. However, some urgencies may arise. For those cases, each student has an allowance of maximum 3 times per quarter to go to the bathrooms. Student should be adult enough for managing these urgencies. If there is some medical reason that student must go to the bathroom more often, only notes from a doctor approved by the Administration will be accepted.</p>	<ul style="list-style-type: none"> <li>Key words</li> </ul> <p><b>Problem of the Day (POD) notebook:</b> In each class the student will start an assignment autonomously. It's a duty from the student to maintain the POD's notebook updated. When the student is absent, he/she will update it at home.</p> <p>Binders and POD's notebook will be graded at the end of each marking period. Full points will be awarded for an organized binder with all notes, worksheets, homework, and other handouts hole punched and in the 3 rings and a complete POD's notebook. <b>No photocopies of any part of another student's binder are acceptable.</b> This is an easy end-of-the-quarter grade boost!</p>
<p><b>Grading Policy</b></p> <p>Homework/Classwork/Binder/POD (Formative Assessments) <input type="checkbox"/> <b>40%</b> Quizzes/Tests/Projects (Summative Assessments) <input type="checkbox"/> <b>60%</b></p> <p>90% - 100% = A 80% - 89% = B 70% - 79% = C 60% - 69% = D 59% or lower = F</p> <p><b>Extra points:</b> There will be activities for getting extra points in order to improve students' teamwork, such as:</p> <ul style="list-style-type: none"> <li>- Individually: weekly students' hall of fame</li> <li>- By group: quarterly competition</li> <li>- By class: quarterly competition</li> </ul> <p>All extra points earned during the marking period will be add as Formative Assessments. The extra points could not roll over from one period to the following one.</p> <p><b>Cell Phone/Electronic Device Policy:</b></p>	<p><b>Homework:</b> Homework will be assigned very frequently. An assignment is considered complete if all work is shown, and it is ready when the teacher will ask for. Random, unannounced assignments will be graded on correctness so be sure to always do your best on homework assignments.</p> <p>When absent, homework and POD's must still be completed and shown for credit. It is your responsibility to hand in the missed assignment. <b>Students involved in extracurricular activities that have early dismissals are expected to have homework completed the next day they are present even when not in class to get the assignment.</b> There is no excuse for not knowing what is due or was missed when missing from class as homework calendar and assignments will be posted on the School website and in class weekly.</p> <p><b>Project:</b> In every marking period, each student has to present to the rest of the class a specific topic and has to be able to answer the questions of their peers. The schedule will be assigned by lottery during the second week of the quarter. In order to</p>

- Electronics of any type, including earphones or smartwatches ARE NOT allowed in the classroom during class time, unless instructed by the teacher.
- Just a reminder, as per school policy, any electronic device will be confiscated if seen on-campus and will be delivered to Security office. The 1st time will be 24 hours on-hold, the 2n time 48 hours on-hold and the 3rd 72-hours on-hold. Not delivering the electronic device when asked by the teacher will increase this on-hold period.

be fair with all students, the student will know the subject to present one week before. If there is a conflict with the schedule assigned, please inform the teacher during the first second of the period. Later on, any schedule change will be allowed. The grading of the project will be 20% of the Summative Assessment.