

Welcome to My Class

Teacher: Noe Gamez Room 235 Conference: 3rd Block <u>11:21 am - 12:51 pm</u> School Phone #: 271-1600

Course Description:

This course is designed to teach students to be successful mathematical problem solvers. It is a continuation of algebraic and geometric concepts developed in Algebra I and Geometry.

Course Objective:

The topics covered will be the properties/attributes of functions (linear, quadratic, square root, rational, exponential, logarithmic and cubic functions) and their multiple representations. Students will solve systems of equations/inequalities, apply matrices to systems of equations, and evaluate the effectiveness of various methods used to solve quadratic and square root equations/inequalities. Also, students will apply exponential and logarithmic equations to real life application problems.

I will provide you the opportunity to be successful, but you must do your part.

Academic Expectations

- 1. Come to class prepared with all materials including assignments, binder, pencil and paper.
- 2. Come to class on time and be ready to participate appropriately and as soon as the bell rings.
- 3. Use academic language to demonstrate comprehension and engage in mathematical discourse.

Behavioral Expectations

- 1. Respect yourself, others and property.
- 2. Follow directions the first time they are given <u>and</u> remain on task until the bell rings.
- 3. Comply with all district and school rules/policies.

Supply List

You are to bring the following items to class every day:

- 3-ring binder or folder with paper (loose leaf & graph)
- Pencil, eraser, colored pencils, highlighter, composition book
- TI-84 Calculator or TI-Inspire (at home use).

Binder/Folder

Your binder is expected to be kept up-to-date. It may count as a quiz grade. The Course Information Sheet and the Semester Calendar will be placed at the beginning of the binder.

Grading Procedure*

Minor Assignments (40%)

Daily Classwork/Homework/Quiz

Work will be assigned daily. Homework/classwork is practice and needs to be completed when assigned so you can be successful and is due the next day. <u>No late</u> homework will be accepted (unless you were absent). Quizzes may be announced prior to assigning them.

Major Assignments (60%)

<u>Exam/Project/Presentation/Report</u> There will be a minimum of 3 major assessments per grading period.

Make-up Policy*

If you are absent on the day of a quiz or test, you will be expected to take the quiz/test the day you return (before/after school only). If you are absent the day of a homework/classwork assignment, it is your responsibility to make-up the assignment within one day.

*See district grading procedures and policy for more specifics.



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Classroom Expectations

- <u>Complete</u> ALL class assignments which are planned to increase student understanding
- <u>Budget time</u> effectively and efficiently. Students will not be allowed to submit late minor work.
- <u>Seek</u> help when needed by meeting with teachers or attending tutorial sessions.
- Have good <u>attendance</u>.

Tutoring Schedule

Remind

Remind is a service that provides a safe way for teachers to text message students and parents without needing to know their phone number and without having to give their phone number out. All you have to do is text the following code to the number **81010**:

My Block class code: ______ *Students/parents are unable to reply to text messages from teacher. To contact teacher, please use the school email.



Attendance/Exemptions

Attendance is very important. It is important to be in class so as not to miss a lesson/assignment/quiz/test. Also, Semester Exam Exemptions will be determined by your attendance and grades. Please refer to the district's High School Semester Exam Exemption policy for specifications.

Miscellaneous

- Check <u>Skyward</u> often for most current grades.
- Expect to <u>remain</u> in class for the entire block.
- No eating or drinking in class.
- <u>BYOD</u>: Electronic devices (i.e. cell phones, iPads, iPods, MP3 players, video games) are to be used for academic course content and should be put away throughout the block.
- Cell Phone/BYOD <u>Violation</u> Policy:

1st violation: 24 hr confiscation, \$15 fine and parent pick up of device

2nd violation: 48 hr confiscation, \$15 fine and parent pick up of device

3rd violation: confiscation until the end of the year (no exceptions)

- <u>PODs</u> (Problem of the Day) will be used to further prepare students for their upcoming TSI/ACT/SAT exams. Students will copy and work on the POD at the beginning of class upon arrival.
- Upon entering class, <u>get ready</u>. Turn in your phone, pick up your assigned calculator, sharpen your pencil, take out your Math Journal, homework (if due), and work on the POD, etc.

REVIEWS MAY BE COLLECTED ON TESTING DAYS

PLEASE SIGN AND KEEP IN BINDER:

I understand and accept the responsibility for completing the coursework and following all class expectations.

Student Name	
Student signature	Date
As a parent/guardian, I understand and accept responsibility $% \left({{{\left[{{{\left[{{{c_{{\rm{m}}}}} \right]}} \right]}_{\rm{max}}}}} \right)$	to help this student fulfill the obligation of this course.
Parent /Guardian Name	
Parent/Guardian signature	Date

Algebra II Course Information/Syllabus

Tentative Course Timeline

Chapter 1 – Functions

- 1 1 Relations and Functions
- 1-2 Attributes of Functions
- 1 3 Function Operations and Composition
- 1 4 Inverse Functions

Chapter 2 – Absolute Value Equations and Functions

- 2 1 Absolute Value Equations
- 2 2 Solving Absolute Value Inequalities
- 2 3 Attributes of Absolute Value Functions
- 2-4 Transformations of Absolute Value Functions
- 2 5 Graphing Absolute Value Inequalities

Chapter 3 – Systems of Linear Equations

- 3 1 Solving Systems Using Tables and Graphs
- 3 2 Solving Systems Algebraically
- 3 3 Systems of Inequalities
- 3 5 Systems in Three Variables
- 3 6 Solving Systems Using Matrices

Chapter 5 – Quadratic Functions and Equations

- 5 1 Attributes and Transformations of Quadratic Functions
- 5 2 Standard Form of a Quadratic Function
- 5 3 Modeling with Quadratic Functions
- 5 4 Focus and Directrix of a Parabola
- 5 5 Factoring Quadratic Expressions
- 5 6 Quadratic Equations
- 5 7 Completing the Square
- 5 8 The Quadratic Formula
- 5 9 Complex Numbers
- 5 10 Quadratic Inequalities
- 5 11 Systems of Linear and Quadratic Equations

Chapter 6 – Square Root Functions and Equations

- 6 1 Square Root Functions as Inverses
- 6 2 Attributes of Square Root Functions
- 6 3 Transformations of Square Root Functions
- 6 4 Introduction to Square Root Equations
- 6 5 Solving Square Root Equations

Chapter 7 – Exponential & Logarithmic Functions and Equations

- 7 1 Attributes of Exponential Functions
- 7 2 Transformations of Exponential Functions
- 7 3 Attributes and Transformations of $f(x) = e^{x}$
- 7 4 Exponential Models in Recursive Form
- 7 5 Attributes of Logarithmic Functions
- 7 6 Properties of Logarithms
- 7 7 Transformations of Logarithmic Functions
- 7 8 Attributes and Transformations of the Natural Logarithm Function
- 7 9 Exponential and Logarithmic Equations
- 7 10 Natural Logarithms

Chapter 8 – Polynomials

- 8 1 Attributes of Polynomial Functions
- 8 2 Adding, Subtracting, and Multiplying Polynomials
- 8 3 Polynomials, Linear Factors, and Zeros
- 8 4 Solving Polynomial Equations
- 8 5 Dividing Polynomials
- 8 6 Theorems About Roots of Polynomial Equations

Chapter 9 – Radical Expressions

- 9-1 Roots and Radical Expressions
- 9 2 Multiplying and Dividing Radical Expressions
- 9-3 Binomial Radical Expressions
- 9-4 Rational Expressions

Chapter 10 – Cubic and Cube Root Functions and Equations

- 10 1 Attributes and Transformations of Cubic Functions
- 10 2 Attributes of Cube Root Functions
- 10 3 Transformations of Cube Root Functions
- 10 4 Cube Root Equations

Chapter 11 – Rational Functions and Equations*

- 11 1 Inverse Variation
- 11 2 Transformations of Reciprocal Functions
- 11 3 Asymptotes of Rational Functions
- 11 4 Rational Expressions
- 11 5 Adding and Subtracting Rational Expressions
- 11 6 Solving Rational Equations