



Algebra II

2011-2012
Mrs. Graiser



Text: Glencoe Algebra II *Integration, Applications, Connections*

- Chapters 1,2,3,5,6,8,9,11,12 (selected sections)

Students will be assigned a numbered textbook for the course. It is their responsibility to return that text at the final exam. Students are fiscally responsible for their textbook.

Course Materials:

Mechanical Pencil or Pencils

TI- 83 Plus Graphing Calculator

Textbook cover

Graph Paper

Loose-leaf Binder with 4 Sections:

Class Notes (you may use a spiral notebook for this).

Homework

Tests and Quizzes

SAT/PSAT

Grading: 75% Tests

- Semester final counts as two test grades.

15% Quizzes

10% Classwork and Homework

Includes:

- preparation for class (2%)
 - class materials
 - seated at bell
- class participation (4%)
 - attendance
 - attention
 - assignment completion
- homework (4%)
 - legible completion of assigned problems

Numeric grades will be translated into letter grades as detailed in the parent/student handbook.

Assessments and assignments will include problems to help determine qualification for honors level placement.

Instructional Objectives for Algebra II

- Analyze and evaluate the characteristics of step, piecewise, exponential, and quadratic functions, as well as inverses of functions.
- Interpret and apply the characteristics of functions with regard to a given context.
- Analyze and evaluate rates of change, both constant and variable, within the basic function families.
- Analyze and evaluate geometric and arithmetic sequences as functions.
- Analyze and solve quadratic equations using a variety of techniques.
- Represent, simplify, and operate with complex numbers.
- Analyze and solve problems involving probabilities, permutations and combinations.
- Analyze and evaluate sample data, making inferences about population means and standard deviations and using these inferences to compare data sets.
- Understand and apply algebraic models to quantify the association between two quantitative variables.

Course Curriculum:

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|---------------------|------------|--|
| Semester I: | Chapter 1 | Analyzing Equations and Inequalities |
| | Chapter 12 | Investigating Discrete Mathematics and Probability |
| | Chapter 3 | Solving Systems of Linear Equations and Inequalities |
| | Chapter 5 | Exploring Polynomials and Radical Expressions |
| Semester II: | Chapter 6 | Exploring Quadratic Functions and Inequalities |
| | Chapter 8 | Exploring Polynomial Functions |
| | Chapter 9 | Exploring Rational Expressions |
| | Chapter 11 | Investigating Sequences and Series |

Class Expectations

1. Students are to arrive promptly with all class materials (notebook, calculator, covered textbook, pencil, and paper). Your class grade will be lowered if you come to class without these items. You are expected to be in your seat and ready for class when the bell rings. (Note: You may share a textbook with the student sitting next to you.)
2. Class and homework assignments are to be completed legibly in pencil. Assignments not completed in an acceptable manner may not be accepted or may be given a reduced grade.
3. Homework is assigned daily and is expected to be in class on the following day. You are responsible to check answers at the back of the text for odd numbered problems. If you have trouble with an assignment, review your notes and try the problem again. If you still have difficulty, call a friend for help. I will review selected problems in class. However, we do not have time to work through all the homework problems. If after attempting the assignment you need help, let me know and we will set up a time to meet. **If you are absent, it is your responsibility to find out what you missed and make up the assignment. If you miss class for an appointment, your homework is due at the next class. If you are absent due to illness, missed assignments are to be completed as soon as possible since new material builds on concepts discussed previously. In accordance with school policy as described in the student handbook all assignments should be made up within three days of returning to school.**
4. Homework may be collected at any time without prior notice. Therefore homework is to be completed on a separate sheet of paper with your name and assignment detailed. If you had extreme difficulty with an assignment, please note it.
5. To promote learning, students are not permitted to call out or disturb the class. If you have a question, raise your hand and wait to be called upon. Students are permitted to work with the student next to them, when problems are assigned in class, in a quiet manner.
6. Students may use the restroom, when necessary, at the beginning of the period or when problems are assigned in class. Only one student is allowed out of the room at a time. Students are responsible for any work they have missed.

7. Mrs. Limor is available for extra help in math Monday period 5, Wednesday period 8 and Thursday period 7.
8. Only water in a closed container will be allowed in class.
9. Class is over when the bell rings. Students are expected to be in their seats and engaged in class until class is over.
10. All school rules will be strictly enforced. (See student hand book).
11. Problems or concerns may be discussed with me individually at school during study hall or lunch if I am available. Parents or students may reach me at home between 8 PM and 10 PM at 404-634-6553 or via e-mail at rgraiser@temima.org. E-mails will generally be answered within 24 hours.
12. If an emergency situation arises preventing you from completing an assignment or studying for a test, a note from a parent is required.

I have read the syllabus and expectations and understand the course rules and requirements.

Student Signature _____

Parent Signature _____