

GTCHS ALGEBRA I

INSTRUCTOR: Gigi Thompson

ROOM: Room 203

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REQUIRED TEXTBOOK: *Algebra I*, 2003, by Schultz, Ellis, Hollowell, and Kennedy (publisher: Holt, Rinehart, and Winston)

OTHER REQUIRED MATERIALS: TI-83 or TI-83 *plus* calculator, 3-ring notebook with tab dividers, graph paper, ruler, colored pencils, dry erase markers, erasers

COURSE DESCRIPTIONS: This full year (one credit) course includes the following: the use of symbolic reasoning to represent mathematical situations, to express generalizations, and to study relationships among quantities; the use of functions to represent and model problem situations, as well as to analyze and interpret relationships; the setting up of equations in a wide range of situations and the use of a variety of methods to solve equations; the use for problem solving, representation, reasoning, and proof, language and communication, and the connections both within and outside mathematics. Please see the attached Algebra I standards.

PREREQUISITE: Mastery of all state-mandated 8th grade standards.

COURSE STRATEGY: Topics described in the course description will be learned through individual study, group projects, and research/reports.

COURSE PURPOSE: Upon successful completion of this course, the student

- ⇒ Will be a more intelligent consumer of numerical and graphical information
- ⇒ Will have gained experience in collecting, processing, and presenting numerical information, both orally and in writing
- ⇒ Will see the need for applications of mathematical concepts in his/her areas of interest
- ⇒ Will have the necessary background for other courses where strong algebraic knowledge is required

SCHOOL RULES/ATTENDANCE/TARDINESS:

Please give special attention to the school rules, as outlined in your student handbook. Also, note that a student who misses even a few days of class puts himself/herself at a severe disadvantage. Excessive tardiness is detrimental in the same way as an absence.

GRADING FOR EACH NINE WEEKS:

| Each nine weeks: | | First semester: | |
|---|-----|---|------|
| Unit tests [¥] , Homework | 50% | Average of first and second nine weeks: | 90% |
| | | First semester exam: | 10% |
| Quizzes, Projects, Reports, Notebook | 50% | Second semester: | |
| | | Average of third and fourth nine weeks | 100% |

[¥] Each unit will be cumulative

^β Your notebook will consist of 3 sections, separated by tab dividers: NOTES, HOMEWORK, AND GRADED WORK. You will correct all graded work. The graded work will be taken up at the end of the course. TAKE PRIDE IN YOUR WORK.

YEARLY GRADE: Average of both semesters 80%
State EOC Test 20%

 YOU WILL BE ASKED TO ATTEND STUDY SESSIONS, IF YOUR AVERAGE OR A UNIT TEST GRADE IS BELOW PROFICIENCY.

UNITS:

First Semester

1st Nine Weeks

- From Patterns to Algebra
- Operations in Algebra
- Equations
- Proportional Reasoning and Statistics

2nd Nine Weeks

- Linear Functions
- Inequalities and Absolute Value
- Systems of Equations and Inequalities
- Exponents and Exponential Functions

Second Semester

3rd Nine Weeks

- Polynomials and Factoring
- Quadratic Functions
- Rational Functions

4th Nine Weeks

- Radicals, Functions, and Coordinate Geometry
- Probability
- Functions and Transformations

MATHEMATICAL MODELING OF REAL WORLD SCENARIOS WILL BE INCORPORATED THROUGHOUT.

THIS IS A TENTATIVE SYLLABUS. THE INSTRUCTOR RESERVES THE RIGHT TO MAKE ADJUSTMENTS AS NECESSARY.

IT IS HOPED THAT YOU WILL MASTER AS WELL AS

ENJOY

THIS COURSE.

