

**GTCHS**  
**INSTRUCTOR:**  
**ROOM:**  
**E-MAIL:**

**ALGEBRA II**  
**Gigi Thompson**  
Room 203  
[gigithompson@gtchs.org](mailto:gigithompson@gtchs.org)

**REQUIRED TEXTBOOK:** *Algebra II*, 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 contains an in-depth study of functions, patterns, relations, and concepts of number systems. This includes linear, quadratic, exponential, absolute value, radical, and rational functions. Conic sections are also addressed. Please see the attached Algebra II standards.

**PREREQUISITE:** Algebra I (80 or better), mastering the state-mandated Algebra I 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 PROCEDURES:**

<b>Each nine weeks:</b>		<b>First semester:</b>	
Tests	50%	Average of first and second nine weeks:	90%
Quizzes	50%	First semester exam:	10%
		<b>Second semester:</b>	
		Average of third and fourth nine weeks	100%
<b>Yearly Grade:</b>		Average of 2 semesters	90%
		Final Exam	10%

**UNITS:**

**First Semester**

*1<sup>st</sup> Nine Weeks*

- Data and Linear Representations
- Numbers and Functions
- Systems of Linear Equations and Inequalities
- Matrices

*2<sup>nd</sup> Nine Weeks*

- Quadratic Functions
- Exponential and Logarithmic Functions
- Polynomial Functions
- Rational and Radical Functions

**Second Semester**

*3<sup>rd</sup> Nine Weeks*

- Conic Sections
- Counting Principles and Probability
- Series and Patterns

*4<sup>th</sup> Nine Weeks*

- Statistics
- Trigonometric Functions
- Further Topics in Trigonometry

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.**

