**COURSE OUTCOME:**

* **Course Description**

The study of functions and an extension of the concepts of Algebra I and many of the concepts of Geometry are provided. Topics covered are: linear and quadratic equations and functions; systems of equations and inequalities; polynomials and rational polynomial expressions; polynomial functions; conic sections; exponential and logarithmic functions; probability and statistics. Satisfactory completion of this course prepares students for entry into Pre-Calculus or Advanced Algebra and Trigonometry. (Prerequisites: Algebra I credit)

* **Hyperlink to state standards** <http://www.tn.gov/education/standards/math.shtml>

**INSTRUCTION:**

* **Topics/Skills Covered**

Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Topics covered in this course include:

* Sequences, Series, & Summations
* Quadratic Functions
* Quadratic Equations
* Polynomial Functions and Equations
* Rational Functions and Equations
* Radical Functions and Equations
* Exponential and Logarithmic Functions and Equations
* Trigonometric Functions
* Probability
* The Design of Statistical Studies
* Gathering Data, Making Inferences, and Justifying Conclusions
* **General Pacing**

Algebra 2 consists of 14 textbook chapters that are organized into units/modules that focus on primary topics. The course is 18 weeks long and the pace of the course depends on the length and material contained in each unit, as well as the students understanding of the material. Additional TNCore state standards must also be covered which may not be included in the textbook.

* **Fees**

All CP math courses have a $5.00 fee. Honors math courses have a $20.00 fee. This is for the purpose of providing calculators, batteries and supplies for classroom use.

**ASSESSMENT:**

* **Expectations**

Algebra 2 students will be expected to master all materials listed in the Tennessee State Standards. Mastery will be determined by unit tests, quizzes, IXL assessments and the final comprehensive exam.

* **Grading Policy**

Grades will be determined by accumulation of points.

Grade Scale:

A 93-100

B 85-92

C 75-84

D 70-74

F below 70

* + Chapter Tests and Quizzes – 45% of total grade
  + Homework , Class Assignments and Projects – 40% of total grade
  + Final state comprehensive exam – cumulative exam which will count 15% of final grade

**GENERAL EXPECTATIONS:**

* **Students:**
  + **Attendance and tardy policies *will follow the Gibbs High School student handbook.***
  + **Honor Code**

Students are expected to do their own work. This includes class work, projects, tests, quizzes, etc. If students are found to be in violation of the Honor Code, a zero will be given on the assignment.

* + **Plagiarism**

According to Harbrace Handbook, 15th edition:

“Plagiarism is defined as presenting someone else’s ideas, research, or opinion as your own without proper documentation, even if it has been rephrased.  It includes, but is not limited to the following:

* + - * Copying verbatim all or part of another’s written work;
      * Using phrases, figures, or illustrations without citing the source;
      * Paraphrasing ideas, conclusions, or research without citing the source;
      * Using all or part of a literary plot, poem, or film without attributing the work to its creator.”

Consequences of Plagiarism

Plagiarism is a form of stealing and academic fraud.  Students who are found guilty of plagiarism will have the option of either redoing the assignment within a specified time period and accepting a grade letter drop or taking a zero on the assignment.  Parents should be involved in making the decision.

* **Teacher:**
* **Communication Strategy:**
* Students are encouraged to communicate any problems they may be having with class content, projects, etc. to the teacher. Students are encouraged to check their grades on the portal.
* Parents are encouraged to email or call the teacher with any questions or concerns at any time.

The tutoring center schedule will be provided as soon as the semester schedule is set. In addition, students may contact the teacher if tutoring is a resource they wish to utilize. Tutoring times are available before and after school and during enrichment.