Fairfield Ludlowe High School - Fairfield Warde High School

ALGEBRA 2

Insert Teacher Name | Insert Room Number

Insert Full Year/Semester | Insert Period

Insert Email Address

COURSE DESCRIPTION

In this course, students will build upon their prior knowledge of linear and quadratic functions, as well as develop an understanding of exponential functions. Students will more deeply examine the library of function and their inverses, including polynomial, rational, square root, cube root, and trigonometric functions. Students will add to their repertoire of functions by analyzing function operations, characteristics of graphs, and solving a multitude of equations.

COURSE ENDURING UNDERSTANDINGS

- Many bivariate data sets can be appropriately modeled by linear, quadratic, or exponential functions because the relationships between the quantities exhibit characteristics similar to those functions.
- Mathematical functions almost never perfectly fit a real-world context, but a function model can be useful for making sense of that context.
- Average rate of change explores the multifaceted relationships between quantities by modeling them with linear functions.
- Composing functions allows simpler functions to be combined to construct a function model that more appropriately captures the characteristics of a contextual scenario.
- Transformations are a special kind of composition. When one of the functions being composed consists only of addition or multiplication, the effects on the other function are straightforward to determine.
- An inverse function defines the way to determine the input value that corresponds to a given output value
- A function is a special mathematical relationship between two variables that can often be used to make sense of observable patterns in contextual scenarios.
- Functions in a family have similar properties, similar algebraic representations, and graphs that share key features.
- Trigonometry connects the study of circles and the study of right triangles.
- Real-world contexts that exhibit periodic behavior or circular motion can be modeled by trigonometric functions.

UNITS OF STUDY

- Modeling with Functions
- The Algebra of Functions
- Function Families
- Trigonometric Functions

COURSE POLICIES AND REQUIREMENTS

GRADING (see FPS BOE Policy 6146.1AR)

Cumulative/In-Progress Grade:

- 10% of the grade will be based on formative assessments, homework completion, and behavior.
- 90% will be based on summative assessments, of which there will be a minimum of eight, with no fewer than 2 per quarter, for this full-year course; these may include Unit Tests, Mid-Unit Tests, Projects, Performance tasks, Summative Quizzes, etc.

End-of-the-Year Grade:

- 80% of the overall course grade will reflect the student's mastery of course content and skills during the school year through the Cumulative/In-Progress Grade.
- 10% of the End-of-the-Year course grade will be based on the Mid-Year Assessment.
- 10% of the End-of-the-Year course grade will be based on the Final Assessment.

Grade Reporting

- All grades will be communicated through Infinite Campus.
- Summative assessment results will be reported back to the student within ten school days from the date of submission or the due date, whichever is later.
- Formative assessment results will be reported back to the student within five school days from the date of submission or the due date, whichever is later and prior to any subsequent assessment..

Guidelines for Late Work:

- Late work will be accepted for both summative and formative tasks within a defined timeline agreed upon between the student and the teacher for excused absences.
- The total points may be reduced as a penalty for late work for unexcused absences. Students will earn a zero (0) if the assignment is not submitted or is submitted after the deadline for late work.

Reassessments:

- Any extenuating circumstances may be discussed with administration to allow alternative reassessment opportunities with administrative approval.
- Reassessment opportunities are defined as twice per year (with a maximum of one per quarter) for assignments that students met the original required deadlines and do not violate the academic integrity policy. Reassessment does not apply to midyear assessments or final assessments.
- Gradebook impact of Reassessment: original and reassessment scores will be averaged in the gradebook.

MATERIALS

(Insert Course Materials Here, ie. Textbook, Binder, Calculator, Highlighters)

EXPECTATIONS OF STUDENTS

(Insert Course Expectations Here)

EXTRA HELP

(Insert Course Expectations Here)

(Insert Additional Information Here)