

COURSE TITLE: Algebra 2 for the 21st Century

Level of Difficulty	Estimated Homework	Prerequisites
Moderate	0-30 Minutes	District: C or higher in Geometry CP Department Suggestion: C or higher in Geometry CP

Course Description:

This course is designed for students who are passionate about applications of mathematics and have a desire for a career in computer programming. In this course, Algebra 2 standards are combined with the game, simulation, and software development concepts into an integrated secondary curriculum that meets both Algebra 2 course requirements and CTE standards. Students will research, analyze, and modify existing program code and develop their own program code that will integrate major Algebra 2 concepts in each of the six units; linear functions, quadratic functions, polynomial function, rational expressions and equations, exponential and logarithmic functions, and systems of equations. Through the unit programming projects, students understand and master the mathematics and programming code necessary in the development of games such as Pong and Angry Birds and the simulation of fractal images based on iterating rational functions. Students will also explore some ethical issues around the rapid development of technology and its impact on society.

Grading:

TBD

Syllabus:

TBD

Supplemental Information:

UC subject area "c"