The Algebra 2 course is intended for those students who have successfully completed Algebra 1 and Geometry and who wish to continue the study of Algebra. It covers such topics as quadratic functions, conic sections, systems of non-linear equations, exponential functions, logarithmic functions, radical functions, rational functions, polynomial functions, data analysis, binomial expansion, statistics, and trigonometry. Studying these and other higher level mathematical concepts and algorithms will demonstrate the need for precision of language, accuracy, logical thinking, and deductive reasoning. Also, this course is designed to develop skills in problem solving as students are shown the application of Algebra in academic, vocational, and practical fields. They will use algebraic techniques coupled with technological tools, such as the graphics calculator, to solve real-world problems. Students will recognize and appreciate the role that Algebra plays in various careers.