

Norwood Public Schools

Curriculum Overview

Algebra II 220H & 231

Description:

Algebra II (220H/231) is a full-year class that extends ideas from Algebra I in depth and is taken after Geometry Honors or level 1 Geometry. The major components of this course will help prepare students to continue their mathematics education at Norwood High School at an advanced pace in order to become college or career ready. A variety of presentation and assessment techniques will be utilized. The major topics that will be covered include: linear functions, inequalities, matrices, quadratics, polynomials, exponential and logarithmic functions, rational functions, sequences and series, as well as periodic functions. This course will integrate SAT and MCAS problems to help students prepare for these exams.

Learning Experiences:

Students will experience learning through many formats in addition to routine classroom experiences. Students will receive direct instruction as well as hands on learning through exploration. The variety of technology utilized includes the use of the ENO Board in conjunction with software programs such as Easiteach and Workspace. Additional technological devices such as MOBI, graphing calculators, and e-Clickers are used. Algebra II students are also exposed to resources in the computer lab and the library to complement the primary Algebra II content. Students complete projects and other various activities.

Textbook Chapters:

Chapter 1: Models, Functions, and Permutations
Chapter 2: Linear Relationships and Functions
Chapter 3: Matrices
Chapter 4: Linear Systems
Chapter 5: Quadratic Equations and Functions
Chapter 6: Polynomials and Polynomial Functions
Chapter 7: Exponential and Logarithmic Functions
Chapter 8: Rational Functions
Chapter 9: Periodic Functions and Trigonometry
Chapter 10: Quadratic Relations
Chapter 11: More Probability
Chapter 12: Sequences and Series
Additional Topics in Trigonometry

Note: The course has been aligned to satisfy the requirements of the March 2011 Common Core Standards for Mathematics. The order of topics covered may vary from the textbook. The curriculum map indicates the general timeline and sequencing.

Resources Used:

Advanced Algebra: Tools For A Changing World, 2001, Prentice Hall, ISBN: 0-13-050184-0