

High School Mathematics, 9-12

WHAT WE TEACH

Newark City Schools teaches curricula tied to and defined by Ohio's Learning Standards, which outline what students should understand and be able to do in their study of mathematics at each grade level. Our mathematics curriculum can be thought of as *A Story of Functions*. The word *story* in the title is meant to capture the notion of coherence as students study and model functions while connecting the major content of school mathematics over grades Pre-K through 12.

Our grade 9 through 12 program includes courses in Algebra 1, Geometry, Algebra 2, and Precalculus, with Advanced Placement offerings in Calculus. We also offer a variety of courses to satisfy the required fourth year of mathematics for students choosing options other than Precalculus.

HOW WE TEACH IT

We deliver responsive, flexible instruction based on learner needs. Teachers stress conceptual understanding of key ideas, while continually returning to organizing principles to structure those ideas.

Whereas *The Standards for Mathematical Content* are a balanced combination of procedure and understanding, teachers also incorporate *The Standards for Mathematical Practice*. These practices rest on important "processes and proficiencies" that develop the learners mathematical maturity and expertise throughout the elementary, middle and high school years.

PROGRAM ESSENTIALS

In striving to help all students grow and succeed mathematically, the following domains specify our critical target areas for high school:

- Number and Quantity
- Algebra
- Functions
- Geometry
- Statistics and Probability