Pre-AP Algebra 1 and North Carolina Standard Course of Study: North Carolina Math 1: Alignment Summary

Pre-AP courses focus deeply on a limited number of concepts and skills with the broadest relevance for high school coursework and college and career success. The course framework serves as the foundation of the course and defines these prioritized concepts and skills.

When teaching a Pre-AP course, teachers have purposeful time and space to bring their own voice and lessons into each unit to best meet the needs of their students and address the full range of state standards. This alignment summary demonstrates the deep connections between the Pre-AP Algebra 1 Course Framework and the North Carolina Standard Course of Study: North Carolina Math 1 to support teachers and schools in their planning. Along with the corresponding standards crosswalk, teachers and schools can use this alignment summary when planning and preparing to implement Pre-AP Algebra 1.

Alignment at a Glance: Very Strong

**NC Math 1:**
- Creating Equations
- Interpreting Functions
- Linear, Quadratic, and Exponential Models
- Reasoning with Equations and Inequalities
- The Real Number System

**Discipline Highlights**

- **✓** Overall, the alignment between the Pre-AP Algebra 1 Course Framework and the NC Math 1 standards is very strong.
- **✓** Across all 10 strands of NC Math 1, the majority of standards are addressed in full or in part by the Pre-AP course framework.
- **✓** All of the standards in the Creating Equations and The Real Number System content strands are covered in full by the Pre-AP framework.
- **✓** The NC Math 1 standards and the Pre-AP course framework also share a deep alignment within the Interpreting Functions; Linear, Quadratic, and Exponential Models; and the Reasoning with Equations and Inequalities content strands.

**INCLUDES**
- Approach to teaching and learning
- Course map
- Course framework
- Sample assessment questions

Alignment between the Pre-AP Algebra 1 Course Framework and the NC Math 1 standards is described as very strong or partial. A very strong alignment is one in which the majority of the standards are fully addressed by the mapped Pre-AP Learning Objectives (LOs). A partial alignment is one in which the standards are partially addressed by the corresponding Pre-AP Learning Objectives. Partial alignment can occur when one framework includes greater specificity or extends beyond the scope of the other framework. Given the focused nature of the Pre-AP course framework, some partial alignments are to be expected.
Alignment at a Glance: Partial

NC Math 1:

- Arithmetic with Polynomial Expressions
- Building Functions
- Expressing Geometric Properties with Equations
- Interpreting Categorical and Quantitative Data
- Seeing Structure in Expressions

Discipline Highlights

- While the overall alignment between the NC Math 1 standards and the Pre-AP Algebra 1 framework is very strong, there are a few areas of partial alignment due to differences in the level of specificity in certain areas.

- Pre-AP has a more intentionally narrow focus on a prioritized set of concepts, so certain topics are considered outside the scope of the Pre-AP course framework. For example, NC.M1.A-APR.1 includes operations with polynomials which is a topic typically covered in pre-algebra courses. As a result, it was not chosen as a focus topic for Pre-AP Algebra 1.

- Though not fully addressed in Pre-AP Algebra 1, the Expressing Geometric Properties with Equations and Interpreting Categorical and Quantitative Data strands are covered in depth in Pre-AP Geometry with Statistics.

Summary

Beyond alignments to the course framework, it is also important for educators to turn to the Pre-AP Shared Principles and Pre-AP Mathematics Areas of Focus to understand the full picture of alignment between Pre-AP Algebra 1 and the NC Math 1 standards. The shared principles and areas of focus represent the Pre-AP approach to teaching and learning, and these principles deeply address skill development and disciplinary practices that cannot be easily captured within a standards crosswalk. **In summary, there are ample opportunities for teachers to address the NC Math 1 standards with confidence throughout this course.**