Pre-AP Algebra 1 and Arizona Mathematics Standards: Algebra 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 Arizona Mathematics Standards: Algebra 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

Arizona Mathematics Standards: Algebra 1

- Creating Equations
- Interpreting Functions
- Linear, Quadratic, and Exponential Models
- Reasoning with Equations and Inequalities
- Seeing Structure in Expressions

Discipline Highlights

- Overall, the alignment between the Pre-AP Algebra 1 Course Framework and the Arizona Mathematics Standards: Algebra 1 is very strong.
- In 10 of the 11 domains of the Arizona Mathematics Standards: Algebra 1, the majority of the standards are covered in full or in part by the Pre-AP course framework.
- The Arizona Mathematics Standards: Algebra 1 and the Pre-AP framework share the deepest alignment in the Interpreting Functions; Reasoning with Equations and Inequalities; and Linear, Quadratic, and Exponential Models content domains.

= Very strong alignment
= Partial alignment

Alignment between the Pre-AP Algebra 1 Course Framework and the Arizona Mathematics Standards: Algebra 1 is described as very strong or partial. A very strong alignment is one in which the majority of 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

Arizona Mathematics Standards: Algebra 1

- Arithmetic with Polynomials and Rational Expressions
- Building Functions
- Quantities
- Statistics and Probability
- The Real Number System

Discipline Highlights

While the overall alignment between the Arizona Mathematics Standards: Algebra 1 and the Pre-AP Algebra 1 Course Framework is very strong, there are a few areas of partial alignment due to the more granular nature of some of the Arizona Mathematics Standards: Algebra 1.

Pre-AP has a more intentionally narrow focus on a prioritized set of concepts, so certain topics, such as conditional probability, are considered outside of the scope of the Pre-AP Course Framework. As a result, the standards within the Conditional Probability and the Rules of Probability content domain of the Arizona Mathematics Standards: Algebra 1 are not covered by the course framework. However, these standards are covered in depth in Pre-AP Geometry with Statistics.

Though not fully addressed in Pre-AP Algebra 1, the Statistics and Probability content domain is 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 Arizona Mathematics Standards: Algebra 1. 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 Arizona Mathematics Standards: Algebra 1 with confidence throughout this course.

Learn more about Pre-AP Algebra 1 at preap.org