Pre-AP Algebra 2 and New Jersey Student Learning Standards for Mathematics: 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 2 Course Framework and the New Jersey Student Learning Standards for Mathematics 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 2.

Alignment at a Glance: Very Strong

New Jersey Student Learning Standards for Mathematics:

- Complex Solutions and Modeling with Rational Exponents
- Periodic Models and the Unit Circle

Discipline Highlights

- Overall, the alignment between the Pre-AP Algebra 2 Course Framework and the New Jersey Student Learning Standards for Mathematics is very strong.

- In three of the four units, the majority of the New Jersey Student Learning Standards for Mathematics are addressed in full or in part by the Pre-AP Algebra 2 Course Framework with many of the remaining concept areas covered in depth in Pre-AP Algebra 1 and Pre-AP Geometry with Statistics.

- The deepest alignment to the New Jersey Student Learning Standards for Mathematics is in the Periodic Models and the Unit Circle unit.

Alignment between the Pre-AP Algebra 2 Course Framework and the New Jersey Student Learning Standards for Mathematics 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

New Jersey Student Learning Standards for Mathematics:

- Polynomials and Analysis of Nonlinear Functions

Discipline Highlights

- While the overall alignment between the New Jersey Student Learning Standards for Mathematics and the Pre-AP Algebra 2 Course Framework is very strong, there are a few areas of partial alignment due to differences in the level of specificity in certain areas.

- The Pre-AP Algebra 2 Course Framework is intentionally focused on functions as a prioritized set of concepts. Therefore, certain topics fall outside the scope of the Pre-AP Algebra 2 Course Framework. For example, the New Jersey Student Learning Standard G.GPE.A.2, deriving the equation of a parabola given a focus and directrix, is outside the scope of the course.

- Though not addressed in Pre-AP Algebra 2, all competencies in the unit of Making Inferences, Justifying Conclusions, and Conditional Probability 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 2 and the New Jersey Student Learning Standards for Mathematics. 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 New Jersey Student Learning Standards for Mathematics with confidence throughout this course.**

Learn more about Pre-AP Algebra 2 at preap.org