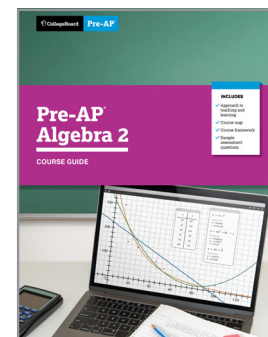




Pre-AP Algebra 2 and New York State Next Generation Mathematics Learning Standards: Alignment Summary

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 York State Next Generation Mathematics Learning Standards 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

NY Next Generation Mathematics:



- Building Functions
- The Complex Number System
- Interpreting Functions
- Linear, Quadratic, and Exponential Models
- Seeing Structure in Expressions
- Trigonometric Functions

Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Algebra 2 Course Framework and the NY Next Generation Mathematics standards is very strong.
- ✓ In twelve of the thirteen domains, the majority of the NY Next Generation Mathematics standards are addressed in full or in part by the Pre-AP Algebra 2 Course Framework with the remaining domain covered in depth in Pre-AP Geometry with Statistics.
- ✓ The deepest alignments to the NY Next Generation Mathematics standards are in the domains of The Complex Number System, Linear, Quadratic, and Exponential Models, and Trigonometric Functions.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Algebra 2 Course Framework and the NY Next Generation Mathematics standards 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

NY Next Generation Mathematics:



- Arithmetic with Polynomials and Rational Expressions
- Creating Equations
- Making Inferences and Justifying Conclusions
- Reasoning with Equations and Inequalities
- The Real Number System
- Conditional Probability and the Rules of Probability

Discipline Highlights



While the overall alignment between the NY Next Generation Mathematics standards 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.



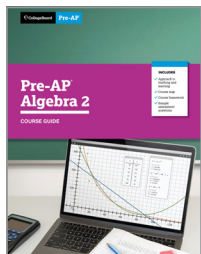
The Pre-AP Algebra 2 Course Framework is intentionally focused on functions as a prioritized set of concepts. However, certain topics fall outside the scope of the Pre-AP Algebra 2 Course Framework because they are not specifically addressed in preparation for AP level courses. For example, standards AII-S.ID.4a and AII-S.ID.4b refer to normal distributions and the function associated with this curve is not a focus of Pre-AP Algebra 2.



Though not fully addressed in Pre-AP Algebra 2, the content domains referring to data, statistics, experiments, surveys, inferences, conclusions, and 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 NY Next Generation Mathematics 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 NY Next Generation Mathematics standards with confidence throughout this course.**



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