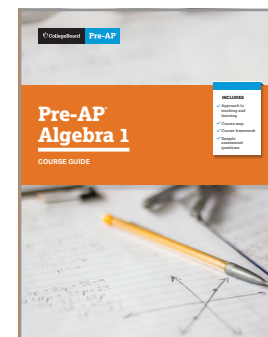




Pre-AP Algebra 1 and Georgia's K-12 Mathematics Standards: Algebra: Concepts and Connections Alignment Summary

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 Georgia's K-12 Mathematics Standards: Algebra: Concepts and Connections (HS Course 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

GA Algebra: Concepts and Connections



- **Mathematical Modeling**
- **Functional & Graphical Reasoning – function notation, modeling linear functions, linear vs. nonlinear comparisons**
- **Patterning & Algebraic Reasoning – linear inequalities and systems of linear inequalities**
- **Patterning & Algebraic Reasoning – quadratic expressions and equations**
- **Functional & Graphical Reasoning – quadratic functions**
- **Patterning & Algebraic Reasoning – exponential expressions and equations**
- **Functional & Graphical Reasoning – exponential functions**

Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Algebra 1 Course Framework and the Georgia course is very strong.
- ✓ Across eight of the 10 standards in Georgia's Algebra: Concepts and Connections course, the majority of the standards are covered in full or in part by the Pre-AP Algebra 1 Course Framework.
- ✓ Georgia's Algebra: Concepts and Connections course and the Pre-AP framework show the deepest alignment in the Mathematical Modeling; Patters and Algebraic Reasoning – linear inequalities and systems of linear inequalities; and Patters and Algebraic Reasoning – quadratic expressions and equations standards.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Algebra 1 Course Framework and Georgia's Algebra: Concepts and Connections (HS Course 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 LOs. 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

GA Algebra: Concepts and Connections



- Geometrical & Spatial Reasoning – distance, midpoint, slope, area, and perimeter
- Numerical Reasoning – rational and irrational numbers, square roots and cube roots
- Data & Statistical Reasoning – univariate data and single quantitative variables; bivariate data

Discipline Highlights



While the overall alignment between Georgia's Algebra: Concepts and Connections course and the Pre-AP Algebra 1 framework is very strong, there are a few areas of partial alignment due to the more granular nature of some of the GA course.



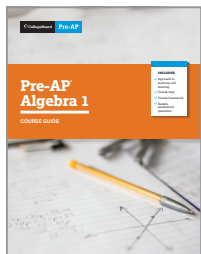
The Pre-AP Algebra 1 Course Framework has a more intentionally narrow focus on a prioritized set of concepts, so certain topics are considered outside the scope of the Pre-AP course. For example, A.GSR.3.2 involves the distance formula and midpoint formula. Because Pre-AP Algebra 1 is focused on building students' fluency with linear, quadratic, and exponential functions, the midpoint and distance formulas are addressed in Pre-AP Geometry with Statistics.



Though not a focus in Pre-AP Algebra 1, the univariate data concepts in the Data & Statistical Reasoning standard 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 Georgia's Algebra: Concepts and Connections course. 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 Georgia's K-12 Mathematics Standards: Algebra: Concepts and Connections (HS Course 1) with confidence throughout this course.**



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