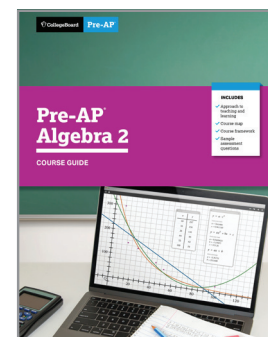




Pre-AP Algebra 2 and Georgia's K-12 Mathematics Standards: Advanced Algebra (Algebra II): Concepts and Connections Alignment Summary

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 2 Course Framework and Georgia's K-12 Standards: Advanced Algebra (Algebra II): Concepts and Connections (HS Course 3) 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

GA Advanced Algebra: Concepts and Connections



- **Mathematical Modeling**
- **Functional & Graphical Reasoning – exponential and logarithmic functions**
- **Functional & Graphical Reasoning – radical functions**
- **Geometric & Spatial Reasoning – trigonometry and the unit circle**

Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Algebra 2 Course Framework and the Georgia course is very strong.
- ✓ Across seven of the eight standards in Georgia's Advanced Algebra: Concepts and Connections course, the majority of the standards are addressed in full or in part by the Pre-AP Algebra 2 Course Framework.
- ✓ Georgia's Advanced Algebra: Concepts and Connections course and the Pre-AP framework show the deepest alignment in Mathematical Modeling; Functional & Graphing Reasoning – exponential and logarithmic functions; and Functional & Graphing Reasoning – radical functions standards.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Algebra 2 Course Framework and Georgia's Advanced Algebra: Concepts and Connections (HS Course 3) 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 Advanced Algebra: Concepts and Connections



- Functional & Graphical Reasoning – polynomial functions
- Patterning & Algebraic Reasoning – linear algebra and matrices
- Functional & Graphical Reasoning – rational functions

Discipline Highlights



While the overall alignment between Georgia's Advanced Algebra: Concepts and Connections course and the Pre-AP Algebra 2 Course Framework is very strong, there are a few areas of partial alignment due to the more granular nature of the GA course.



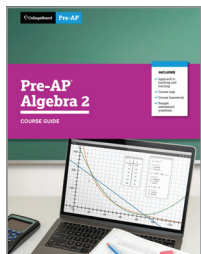
The Pre-AP Algebra 2 Course Framework is intentionally focused on functions as a prioritized set of concepts. Therefore, certain topics fall outside the scope of the Pre-AP Algebra 2 framework. For example, AA.PAR.6.1 involves performing mathematical operations with matrices. In Pre-AP Algebra 2, the matrices unit focuses on linear transformation, a special geometric transformation, and contextual scenarios that only require students to perform matrix multiplication. The other operations, such as addition and subtraction, are not addressed in Pre-AP Algebra 2.



Though not a focus in Pre-AP Algebra 2, the descriptive and inferential statistics in the Data & Statistics Reasoning standard are more fully covered 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 Georgia Advanced Algebra 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 Standards: Advanced Algebra (Algebra II): Concepts and Connections (HS Course 3) with confidence throughout this course.**



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