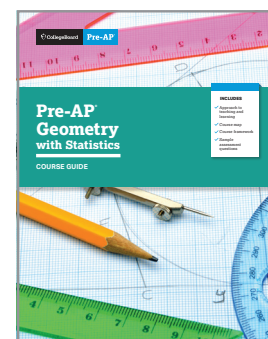




# Pre-AP Geometry with Statistics and Georgia's K-12 Mathematics Standards: Geometry: Concepts and Connections Alignment Summary

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 Geometry with Statistics Course Framework and Georgia's K-12 Mathematics Standards: Geometry: Concepts and Connections (HS Course 2) 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 Geometry with Statistics.



## Alignment at a Glance: Very Strong

### GA Geometry: Concepts and Connections



- **Mathematical Modeling**
- **Geometric & Spatial Reasoning – congruence**
- **Geometric & Spatial Reasoning – similarity**
- **Geometric & Spatial Reasoning – right triangle trigonometry**
- **Geometric & Spatial Reasoning – circles**
- **Geometric & Spatial Reasoning – equations and measurement**
- **Data & Statistical Reasoning; Probabilistic Reasoning – categorical data in two-way frequency tables; conditional probability**

### Discipline Highlights



Overall, the alignment between the Pre-AP Geometry with Statistics Course Framework and the Georgia course is very strong.



Across 10 of the 11 standards in Georgia's Geometry: Concepts and Connections course, the majority of the standards are covered in full or in part by the Pre-AP framework.



The alignment between the Pre-AP course framework and the Geometry: Concepts and Connections course is strongest in the following standards: Geometric & Spatial Reasoning – congruence; Geometric & Spatial Reasoning – similarity; and Data & Statistical Reasoning, Probabilistic Reasoning – categorical data in two-way frequency tables, conditional probability.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Geometry with Statistics Course Framework and Georgia's Geometry: Concepts and Connections (HS Course 2) is described as *very strong* or *partial*. A *very strong* alignment is one in which the majority of the 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 Geometry: Concepts and Connections



- Patterns & Algebraic Reasoning – polynomial expressions
- Geometric & Spatial Reasoning – geometric foundations, constructions, and proof
- Geometric & Spatial Reasoning – trigonometry and the unit circle
- Probabilistic Reasoning – compound events and expected values

## Discipline Highlights



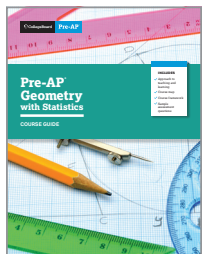
While the overall alignment between Georgia's Geometry: Concepts and Connections course and the Pre-AP Geometry with Statistics framework is very strong, there are a few areas of partial alignment due to certain vocabulary, theorems, proofs, and constructions specifically identified in the Georgia course. The Pre-AP Geometry with Statistics Course Framework is intentionally imprecise with regard to specific theorems and constructions to allow for local flexibility.



The GA Geometry: Concepts and Connections course includes a standard devoted to polynomial expressions in a geometric context. These course expectations are not addressed in Pre-AP Geometry with Statistics, but they are addressed in both Pre-AP Algebra 1 and Pre-AP Algebra 2.

## 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 Geometry with Statistics and the Georgia Geometry 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: Geometry: Concepts and Connections (HS Course 2) with confidence throughout this course.**



Learn more about Pre-AP Geometry with Statistics at [preap.org](https://preap.org).