# Pre-AP Geometry with Statistics and Common Core State 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 Geometry with Statistics Course Framework and the Common Core State 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 Geometry with Statistics.
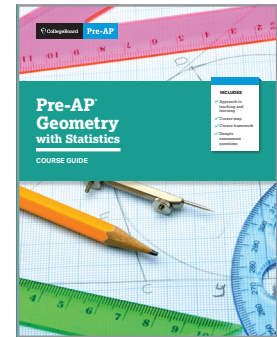
Alignment at a Glance: Very Strong

CCSS for Mathematics:

- **Congruence, Proof, and Constructions**
- **Similarity, Proof, and Trigonometry**
- **Extending to Three Dimensions**
- **Connecting Algebra and Geometry through Coordinates**
- **Circles With and Without Coordinates**

Discipline Highlights

✓ Overall, the alignment between the Pre-AP Geometry with Statistics Course Framework and the CCSS for Mathematics is very strong.

✓ Across the six Geometry units of the CCSS for Mathematics, the majority of the standards are addressed in full or in part by the Pre-AP course framework.

✓ The alignment between the Pre-AP course framework and the CCSS for Mathematics is strongest in the Congruence, Proof, and Constructions; Similarity, Proof, and Trigonometry; and Application and Probability units.

✓ The Pre-AP course framework extends beyond geometry and also addresses some Statistics and Probability concepts from the CCSS for Mathematics.

🍎 = **Very strong alignment**

🍎 = **Partial alignment**

Alignment between the Pre-AP Geometry with Statistics Course Framework and the CCSS for Mathematics is described as *very strong* or *partial*. A *very strong* alignment is one in which the majority of standards are 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 alignments can occur when one framework includes greater specificity or extends beyond the scope of the other framework. Given the focused nature of Pre-AP, some partial alignments are to be expected.

Alignment at a Glance: Partial

CCSS for Mathematics:

- **Applications of Probability**
- **Descriptive Statistics**
- **Inferences and Conclusions from Data**

Discipline Highlights

✓ While the overall alignment between the CCSS for Mathematics and the Pre-AP Geometry with Statistics framework is very strong, there are some areas of partial alignment given the intentional focus and approach of the Pre-AP framework.

✓ The CCSS for Mathematics sometimes include more specific statements than the Pre-AP learning objectives. For example, HSG.CO.C.9 includes a number of specific theorems that are not listed explicitly within the Pre-AP learning objectives. However, there are natural opportunities to address those theorems within the framework. Similarly, the CCSS Applications of Probability include specific rules that are not named as explicitly within the course framework.

Summary

Beyond alignments to the course framework, it is also important for educators to turn to the Pre-AP Shared Principles and Mathematics Areas of Focus to understand the full picture of alignment between Pre-AP Geometry with Statistics and the CCSS 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 CCSS for Mathematics with confidence throughout this course.**
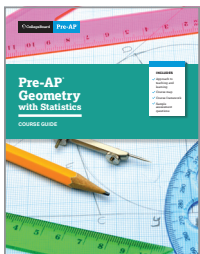
Learn more about Pre-AP Geometry with Statistics at preap.org