Pre-AP Geometry with Statistics and Illinois Learning 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 Illinois Learning 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

Illinois Learning Standards for Mathematics:

- Unit 1: Congruence, Proof, and Construction

Discipline Highlights

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

- Across the six units of the Illinois Learning Standards for Mathematics, the majority of the standards are covered in full or in part by the Pre-AP course framework.

- The Pre-AP course framework extends beyond geometry and covers some algebra concepts from the Illinois Learning Standards for Mathematics.

= Very strong alignment

= Partial alignment

Alignment between the Pre-AP Geometry with Statistics Course Framework and the Illinois Learning Standards for Mathematics 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 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

Illinois Learning Standards for Mathematics:

- Unit 2: Similarity, Proof, and Trigonometry
- Unit 3: Extending to Three Dimensions
- Unit 4: Connecting Algebra and Geometry through Coordinates
- Unit 5: Circles with and Without Coordinates
- Unit 6: Applications of Probability

Discipline Highlights

- While the overall alignment between the Illinois Learning Standards for Mathematics and the Pre-AP Geometry with Statistics framework is very strong, there are a few areas of partial alignment due to the more specific nature of some of the Illinois Learning Standards for Mathematics. The Illinois Learning Standards for Mathematics include more specific statements than the Pre-AP learning objectives. For example, several specific theorems regarding lines and angles are addressed in standard G.CO.9 that are not explicitly covered by the Pre-AP learning objectives. However, the course framework and model lessons provide opportunities to address these theorems throughout instruction.

- The Pre-AP framework has an intentionally narrow focus on a prioritized set of concepts, so certain topics are considered outside of the scope of the Pre-AP framework. For example, while the Pre-AP framework does include an introduction to right triangle trigonometry, it does not fully cover some of the applications of trigonometry, such as the Law of Sines.

Summary

Beyond alignments to the Pre-AP 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 Illinois Learning Standards 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 Illinois Learning Standards for Mathematics with confidence throughout this course.

Learn more about Pre-AP Geometry with Statistics at preap.org