Pre-AP Algebra 2 and California 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 Algebra 2 Course Framework and the California Common Core State Standards Mathematics (CA CCSSM) 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

CA CCSSM:

- Interpreting Functions
- Building Functions
- Linear, Quadratic, and Exponential Models
- Trigonometric Functions
- The Complex Number System
- Seeing Structure in Expressions

Discipline Highlights

- Overall, the alignment between the Pre-AP Algebra 2 Course Framework and the CA CCSSM is very strong.
- In ten of the thirteen domains of the Traditional Pathway: High School Algebra II course, the majority of the CA CCSSM is addressed in full or in part by the Pre-AP Algebra 2 Course Framework.
- The deepest alignments are in the CA CCSSM standards for Trigonometric Functions, The Complex Number System, Building Functions, and Linear, Quadratic, and Exponential Models domains.

= Very strong alignment

= Partial alignment

Alignment between the Pre-AP Algebra 2 Course Framework and the CA CCSSM 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 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

CA CCSSM:

- Arithmetic with Polynomial and Rational Expressions
- Creating Equations
- Reasoning with Equations and Inequalities
- Making Inferences and Justifying Conclusions

Discipline Highlights

- While the overall alignment between the CA CCSSM and the Pre-AP Algebra 2 Course Framework is very strong, there are a few areas of partial alignment due to differences in the level of specificity in certain areas.

- The Pre-AP Algebra 2 Course Framework is intentionally focused on functions as a prioritized set of concepts. Therefore, certain topics are outside the scope of the Pre-AP Algebra 2 Course Framework. For example, standard A-APR.4 addresses the topic of polynomial identities and Pythagorean triples. Because this has a geometric rather than functions application, it is not a focus topic for Pre-AP Algebra 2.

- Though not addressed in Pre-AP Algebra 2, the domains focusing on geometry and statistics 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 2 and the CA CCSSM. 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 CA CCSSM standards with confidence throughout this course.

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

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