Pre-AP Algebra 2 and Maryland College and Career Ready 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 Maryland College and Career Ready Standards for Mathematics: Algebra 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 Algebra 2.

Alignment at a Glance: Very Strong

MCCRSM

- **Big Idea 1:** Understand the properties of the real and complex number systems
- **Big Idea 7:** Build, interpret, and analyze expressions and functions
- **Big Idea 8:** Make connections between the unit circle and trigonometric relationships

**Discipline Highlights**

- **Overall,** the alignment between the Pre-AP Algebra 2 Course Framework and the Maryland College and Career Ready Standards for Mathematics is very strong.
- **Across the eight big ideas of the Maryland College and Career Ready Standards for Mathematics: Algebra 2 course,** the majority of the standards are addressed in full or in part by the Pre-AP Algebra 2 Course Framework.
- **The deepest alignments to the Maryland standards are in Big Idea 1, Big Idea 7, and Big Idea 8.**

= Very strong alignment

= Partial alignment

Alignment between the Pre-AP Algebra 2 Course Framework and the Maryland College and Career Ready Standards for Mathematics: Algebra 2 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

MCCRSRM

- **Big Idea 3:** Interpret representations
- **Big Idea 5:** Create expressions, equations, and functions to represent the relationship between quantities

**Discipline Highlights**

- While the overall alignment between the Maryland College and Career Ready Standards for Mathematics: Algebra 2 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 Maryland standards.

- The Pre-AP Algebra 2 Course Framework has a more intentionally narrow focus on a prioritized set of concepts, so certain topics are considered outside the scope of the Pre-AP course. For example, writing a quadratic function defined by an expression in different but equivalent forms to explain the different properties are covered in detail in Algebra 1 courses, so it is not a focus topic for Pre-AP Algebra 2.

- Though not fully addressed in Pre-AP Algebra 2, Maryland standard S.ID.B.6 is covered in depth in Pre-AP Algebra 1.

**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 Maryland College and Career Ready Standards for Mathematics: Algebra 2. 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 Maryland College and Career Ready Standards for Mathematics: Algebra 2 with confidence throughout this course.**

Learn more about Pre-AP Algebra 2 at [preap.org](http://preap.org).