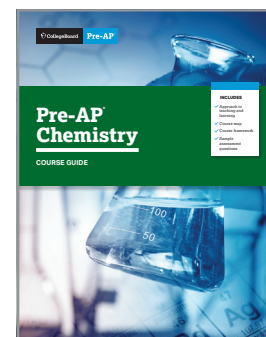




Pre-AP Chemistry and Maryland Next Generation Science Standards: High School Physical Sciences: Alignment Summary

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 Chemistry Course Framework and the Maryland Next Generation Science Standards: High School Physical Sciences 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 Chemistry.



Alignment at a Glance: Very Strong

MD NGSS



- Matter and Its Interactions
- Energy

Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Chemistry Course Framework and the Maryland NGSS: High School Physical Sciences is very strong.
- ✓ The great majority of the Maryland standards are addressed by the Pre-AP framework.
- ✓ The Maryland standards and the Pre-AP framework share the deepest alignment within the Matter and Its Interactions content strand, especially for key topics such as atomic structure, chemical reactions, and conservation of mass.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Chemistry Course Framework and the Maryland NGSS: High School Physical Sciences 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

Discipline Highlights



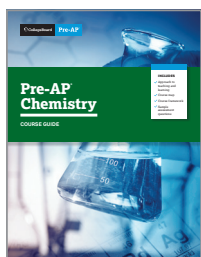
While the overall alignment between the Maryland standards and the Pre-AP Chemistry framework is strong, there are some expected areas of partial alignment or gaps in alignment due to the nature of some of the Maryland standards. However, the Pre-AP areas of focus and shared principles provide teachers the opportunity to fully address the Maryland standards.



The Pre-AP 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, HS-PSI-6 in the Maryland standards, which addresses equilibrium, is not included in the Pre-AP framework.

Summary

Beyond alignments to the course framework, it is also important for educators to turn to the Pre-AP shared principles and Pre-AP science areas of focus to understand the full picture of alignment between Pre-AP Chemistry and the Maryland Next Generation Science Standards: High School Physical Sciences. 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 Next Generation Science Standards: High School Physical Sciences with confidence throughout this course.**



Learn more about Pre-AP Chemistry at preap.org.