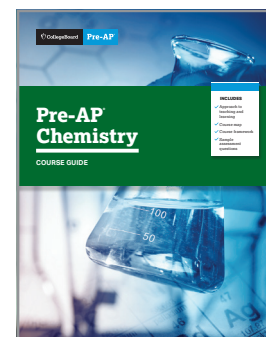


# Pre-AP Chemistry and Colorado Academic Standards for Science: Alignment Summary

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 Colorado Academic Standards for Science 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

### Colorado Academic Standards for Science:



- Structure and Interactions of Matter
- Conservation of Energy
- Chemical Processes
- Energy Transfer
- Energy

### Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Chemistry Course Framework and the Colorado Academic Standards for Science is very strong.
- ✓ Across all five listed grade level expectations from the Colorado Academic Standards for Science, the majority of the standards are covered in full by the Pre-AP Chemistry Course Framework.
- ✓ The Pre-AP Chemistry Course Framework often addresses the content within the Colorado Academic Standards for Science with greater depth, level of detail, and scope. The framework contains several learning objectives that extend beyond the content of the Colorado standards.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Chemistry Course Framework and the Colorado Academic Standards for Science 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

## Discipline Highlights



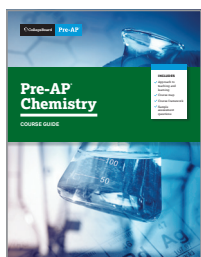
While the overall alignment between the Colorado Academic Standards for Science and the Pre-AP Chemistry framework is very strong, there are a few areas of partial alignment due to the more granular nature of some of the Colorado Academic Standards for Science.



The Pre-AP Chemistry Course Framework has a more intentionally narrow focus on a prioritized set of concepts, so certain topics are considered outside the scope of the course. For example, standard SC.HS.1.2.d asks students to “refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium.” This is beyond the stated purview of the Pre-AP framework and is not addressed by the learning objectives.

## 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 Science Areas of Focus to understand the full picture of alignment between Pre-AP Chemistry and the Colorado Academic Standards for Science. 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 Colorado Academic Standards for Science with confidence throughout this course.**



Learn more about Pre-AP Chemistry at [preap.org](https://preap.org)