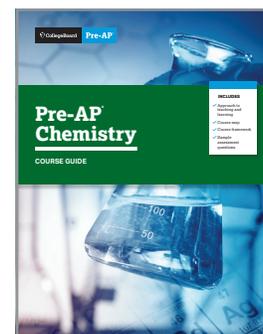




# Pre-AP Chemistry and Arizona Science Standards: Alignment Summary

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 Arizona Science Standards 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

### Arizona Science Standards:



- **Chemical Reactions**

### Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Chemistry Course Framework and the Arizona Science Standards is very strong.
- ✓ Across two of the three units of the Arizona Science Standards, the majority of standards are covered in full or in part by the Pre-AP course framework.
- ✓ The Arizona Science Standards and the Pre-AP Chemistry Course Framework share the strongest alignment in the Chemical Reactions unit.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Chemistry Course Framework and the Arizona Science Standards 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

## Arizona Science Standards:



- Structures and Properties of Matter

## Discipline Highlights



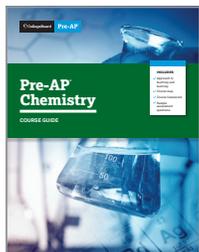
While the overall alignment between the Arizona Science Standards and the Pre-AP Chemistry Course Framework is very strong, there are a few areas of partial alignment due to the more granular nature of some of the Arizona Science Standards. For example, Arizona standard Plus HS+C.P1U1.1 addresses subatomic particles and their effect on atoms' identity, stability, and properties. While the Pre-AP course framework includes almost all of this content, it does not explicitly address atomic stability, so the standard is rated Partial. However, the model lessons provide teachers many opportunities to include stability.



The Pre-AP framework has a more intentionally narrow focus on a prioritized set of concepts, so certain topics are considered outside of the scope of the Pre-AP course. For example, the core idea of Nuclear Processes and Application of Chemistry is considered outside of the stated purview of the Pre-AP framework and is not addressed by the learning objectives.

## 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 Arizona Science Standards. 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 Arizona Science Standards with confidence throughout this course.**



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