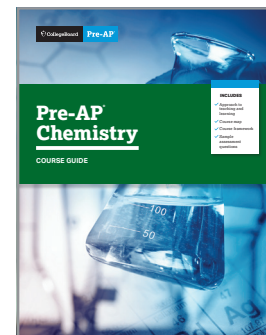




Pre-AP Chemistry and North Carolina Essential Standards: Chemistry: Alignment Summary

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 North Carolina Essential Standards: Chemistry 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

North Carolina Essential Standards: Chemistry



- **Energy: Conservation and Transfer**

Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Chemistry Course Framework and the North Carolina Essential Standards: Chemistry is very strong.
- ✓ Across all three strands of the North Carolina Essential Standards: Chemistry, the majority of standards are covered in full or in part by the Pre-AP course framework.
- ✓ The North Carolina Essential Standards: Chemistry and the Pre-AP framework share the strongest alignment in the Energy: Conservation and Transfer content strand.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Chemistry Course Framework and the North Carolina Essential Standards: Chemistry 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

North Carolina Essential Standards: Chemistry



- Interactions of Energy and Matter
- Matter: Properties and Change

Discipline Highlights



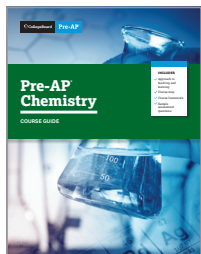
The North Carolina Essential Standards: Chemistry, at times, include more specific language than the Pre-AP Learning Objectives. For example, the clarifying objective for standard Chm 3.1.1 states, "Explain the factors that affect the rate of a reaction (temperature, concentration, particle size and presence of a catalyst)." Although the Pre-AP learning objective does not specifically address catalysts, the broader expectation of understanding can be taught using LO 4.5.A.1.



Pre-AP 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, radioactive decay, nuclear energy, and half-life are beyond the stated purview of the Pre-AP framework and are 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 North Carolina Essential Standards: Chemistry. 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 North Carolina Essential Standards: Chemistry with confidence throughout this course.**



Learn more about Pre-AP Chemistry at preap.org