



Pre-AP Chemistry and South Carolina Academic Standards and Performance Indicators 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 South Carolina Academic Standards and Performance Indicators 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

South Carolina Academic Standards and Performance Indicators for Science:



States of Matter

Discipline Highlights



Overall, the alignment between the Pre-AP Chemistry Course Framework and the South Carolina Academic Standards and Performance Indicators for Science is very strong.



Across six of the seven Disciplinary Core Ideas in the South Carolina Academic Standards and Performance Indicators for Science, the majority of standards are covered in full or in part by the Pre-AP course framework.



The South Carolina Academic Standards and Performance Indicators for Science and the Pre-AP Chemistry Course Framework share the strongest alignment in the States of Matter Disciplinary Core Idea.



Very strong alignment



= Partial alignment

Alignment between the Pre-AP Chemistry Course Framework and the South Carolina Academic Standards and Performance Indicators for Science 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

South Carolina Academic Standards and Performance Indicators for Science:



- Atomic Structure and Nuclear Processes
- Bonding and Chemical Formulas
- Chemical Reactions
- Solutions, Acids, and Bases
- Thermochemistry and Chemical Kinetics

Discipline Highlights



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 framework. For example, nuclear chemistry is not addressed by the learning objectives because it is considered outside the purview of the Pre-AP framework.



The South Carolina Academic Standards and Performance Indicators for Science, at times, include more specific statements than the Pre-AP Learning Objectives. For example, the performance indicator for standard H.C.5A.4 states, "Analyze and interpret data to describe the properties of acids, bases, and salts". While the Pre-AP Chemistry Course Framework does not specifically address salts, the broader expectation of understanding can be taught using LO 4.3.D.1.



Science and engineering practices are integrated in the Pre-AP learning objectives. As a result, the standards addressed within the Disciplinary Core Idea of Science and Engineering Practices are not explicitly covered by the Pre-AP Chemistry Course Framework. However, the framework provides frequent opportunities to address and develop these practices.

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 South Carolina Academic Standards and Performance Indicators 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 South Carolina Academic Standards and Performance Indicators for Science with confidence throughout this course.



Learn more about Pre-AP Chemistry at preap.org