



Pre-AP Chemistry and Mississippi College- and Career-Readiness Standards for Science: 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 Mississippi College- and Career-Readiness Standards for Science: 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

Mississippi College- and Career-Readiness Standards for Science: Chemistry



- Chemical Reactions
- Thermochemistry
- Gas Laws

Discipline Highlights



Overall, the alignment between the Pre-AP Chemistry Course Framework and the Mississippi College- and Career-Readiness Standards for Science: Chemistry is very strong.



For ten of the twelve Disciplinary Core Ideas in the Mississippi College- and Career-Readiness Standards for Science: Chemistry, the majority of the standards are covered in full or in part by the Pre-AP Chemistry Course Framework.



The Mississippi College- and Career-Readiness Standards for Science: Chemistry and the Pre-AP framework share the strongest alignment within the Disciplinary Core Ideas of Chemical Reactions and Gas Laws.



Very strong alignment



= Partial alignment

Alignment between the Pre-AP Chemistry Course Framework and the Mississippi College- and Career-Readiness Standards for Science: 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

Mississippi College- and Career-Readiness Standards for Science: Chemistry



- · Acids and Bases
- Bonding
- Naming Compounds
- Organic
 Nomenclature
- Periodic Table
- Solutions

Discipline Highlights



While the overall alignment between the Mississippi College- and Career-Readiness Standards for Science: Chemistry 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 Mississippi College- and Career-Readiness Standards for Science: Chemistry. For example, MS Standard 9.4 lists three acid-base models. The Pre-AP curriculum includes the most significant two of the three models and provides teachers with opportunities to incorporate the third within the model lessons.



The Pre-AP Chemistry Course 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 Disciplinary Core Ideas of Atomic Theory and Equilibrium are considered outside of the stated purview of the Pre-AP framework and are not addressed by the learning objectives.



Although the Computational Analysis standards do not explicitly match the language of the learning objectives, the mathematical practices the standards address are embedded in the Pre-AP LOs and EKs and can be fully covered throughout instruction.

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 Mississippi College- and Career-Readiness Standards for Science: 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 Mississippi College- and Career-Readiness Standards for Science: Chemistry with confidence throughout this course.



Learn more about Pre-AP Chemistry at preap.org