Pre-AP Chemistry and Washington State Science Learning 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 Washington State Science Learning 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

WASHINGTON STATE SCIENCE LEARNING STANDARDS:

- Matter and Its Interactions
- Energy

DISCIPLINE HIGHLIGHTS

Overall, the alignment between the Pre-AP Chemistry Course Framework and the Washington State Science Learning Standards is very strong.

Across both strands of the Washington State Science Learning Standards, the majority of the standards are addressed in full by the Pre-AP framework.

The Washington State Science Learning Standards and the Pre-AP framework share the strongest alignment within the Matter and Its Interactions content strand, especially within topics such as atomic structure, chemical reactions, and conservation of mass.

= Very strong alignment

= Partial alignment

Alignment between the Pre-AP Chemistry Course Framework and the Washington State Science Learning 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

**Discipline Highlights**

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, the performance expectation for standard HS-PS1-6 states that students should be able 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 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 Washington State Science Learning 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 Washington State Science Learning Standards with confidence throughout this course.**