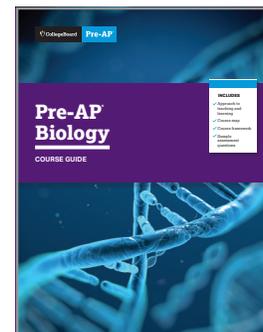




Pre-AP Biology and Arizona Science Standards for Life Science and Biology: Alignment Summary

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 Biology Course Framework and the Arizona Life Science Plus 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 Biology.



Alignment at a Glance: Very Strong

AZ Life Science Plus Standards:



- Cells & Organisms
- Ecosystems
- Genetics
- Evolution

Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Biology Course Framework and the Arizona Life Science Plus Standards is very strong.
- ✓ All four of the Arizona Life Science core ideas and their standards are addressed in full or in part by the Pre-AP Biology Course Framework.
- ✓ The majority of the Arizona Life Science Plus Standards are addressed in full by the Pre-AP Biology Course Framework.
- ✓ All Arizona Life Science Plus Standards within the Evolution strand are fully aligned.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Biology Course Framework and the Arizona Life 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

Discipline Highlights



While the overall alignment between the Arizona Life Science Plus Standards and the Pre-AP Biology Course Framework is very strong, there are a few areas of partial alignment due to the more granular nature of some of the Arizona standards.



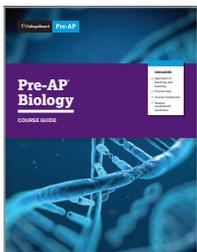
Arizona Life Science Plus Standards at times include greater specificity than the Pre-AP Learning Objectives. For example, Arizona Essential Standard HS.L2U3.18 specifies that students evaluate “the positive and negative ethical, social, economic, and political implications of human activity on the biodiversity of an ecosystem.” Although the Pre-AP Biology Course Framework does not specifically address political, social, or economic impacts, these topics can be addressed within the broader topic of human impact on the biodiversity of ecosystems, which is covered by Pre-AP Learning Objective ECO.5.2, and the related Pre-AP Essential Knowledge statement 5.2.1, which covers human activities such as anthropogenic climate change, the introduction of invasive species, habitat destruction, and air/water pollution.



Another example of partial alignment due to different levels of specificity is Arizona Essential Standard HS.L3U3.26, which asks students to engage in argument from evidence regarding the ethical, social, economic, and/or political implications of a current genetic technology. Educators may address this standard while engaging students with Pre-AP LO GEN 6.1(c), “Explain potential benefits and/or consequences of manipulating DNA of organisms,” and the Pre-AP Essential Knowledge statement GEN 6.1.1, which addresses biotechnology and how the use of genetic engineering techniques can result in both positive and negative consequences.

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 Biology and the Arizona Life Science Plus 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 Life Science Plus Standards with confidence throughout this course.**



Learn more about Pre-AP Biology at preap.org