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 Tennessee Academic Standards for Biology 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

**TN Academic Standards for Biology:**
- From Molecules to Organisms: Structures and Processes
- Ecosystems: Interactions, Energy, and Dynamics
- Heredity: Inheritance and Variation of Traits
- Biological Change: Unity and Diversity

**Discipline Highlights**

- Overall, the alignment between the Pre-AP Biology Course Framework and the Tennessee Academic Standards for Biology is very strong.
- All five of the Tennessee Academic Standards for Biology disciplinary core ideas are covered in full or in part by the Pre-AP Biology Course Framework.
- All standards in the Ecosystems, Heredity, and Biological Change disciplinary core ideas are deeply aligned.
- The majority of standards in the disciplinary core idea From Molecules to Organisms are addressed in full.

Alignment between the Pre-AP Biology Course Framework and the Tennessee Academic Standards for Biology 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

**TN Academic Standards for Biology:**
- Links Among Engineering, Technology, Science, and Society

**Discipline Highlights**

While the overall alignment between the Tennessee Academic Standards for Biology 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 Tennessee Academic Standards for Biology.

- Tennessee Academic Standards for Biology include greater specificity than the Pre-AP Learning Objectives for some topics, particularly within the Links Among Engineering disciplinary core idea. For example, BIO1.ETS2.1 specifies that students should relate how molecular biotechnology may be used in a variety of fields. While the Pre-AP Biology Course Framework does not include that level of specificity in the learning objectives, the broader expectation of understanding inheritance and chromosomal disorders is addressed in Pre-AP Learning Objective GEN 6.1(a). Additionally, Pre-AP Essential Knowledge Statement GEN 6.1.1 describes how scientists predict genetic disorders, the use of methods such as PCR, gel electrophoresis, and DNA profiling, as well as how scientists can apply genetic engineering.

**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 Tennessee Academic Standards for Biology. 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 Tennessee Academic Standards for Biology with confidence throughout this course.

Learn more about Pre-AP Biology at preap.org