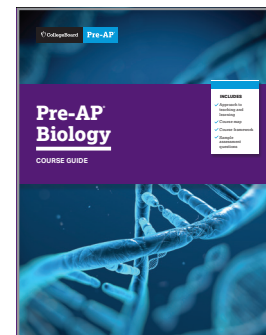




Pre-AP Biology and Michigan K-12 Standards – Science: Alignment Summary

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 Biology Course Framework and the Michigan K-12 Standards – 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 Biology.



Alignment at a Glance: Very Strong

MI K-12 Science Standards



- **Structure and Function**
- **Matter and Energy in Organisms and Ecosystems**
- **Interdependent Relationships in Ecosystems**
- **Inheritance and Variation of Traits**
- **Natural Selection and Evolution**

Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Biology Course Framework and the Michigan K-12 Standards Science is very strong.
- ✓ Across all the strands of the Michigan K-12 Standards Science, the majority of the standards are addressed by the Pre-AP Biology Course Framework.
- ✓ The Michigan K-12 Standards Science and the Pre-AP framework share the deepest alignment within the four life science strands.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Biology Course Framework and the Michigan K-12 Standards – Science is described as *very strong* or *partial*. A *very strong* alignment is one in which the majority of the 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 LOs. 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

MI K-12 Science Standards



• Earth's Systems

• Human Sustainability

Discipline Highlights



While the overall alignment between Michigan K-12 Standards Science and the Pre-AP Biology Course Framework is strong, there are some expected areas of partial alignment or gaps in alignment due to the differences in the level of specificity in some areas.



The Michigan K-12 Standards Science performance expectations leads strongly with the language of science practices; for example, HS.LS1-3 begins "Plan and conduct an investigation ..." Because this does not precisely match the Pre-AP learning objectives, the match is listed as partial. However, these science practices are deeply embedded in the Pre-AP course framework, as evidenced in the instructional material and performance tasks. They are also aligned with the Pre-AP science areas of focus.



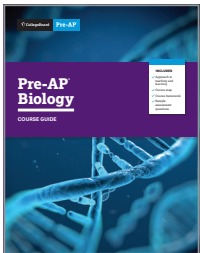
Due to the broad language used in the Michigan K-12 Standards Science performance expectations, in comparison to the Pre-AP learning objectives, we list several alignment areas as partial since we don't have complete confidence in alignment. For example, the Michigan PEs do not explicitly reference concepts related to enzymes like the Pre-AP learning objectives do. However, we do assume some partial alignment here based on PEs related to proteins.



There are some gaps in the alignment with Michigan's Earth and Space Science standards. Pre-AP Biology aligns with both Life Science and Earth and Space Science standards so there may be some topics that are beyond the scope of a more traditional biology course.

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 Michigan K-12 Standards – 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 Michigan K-12 Standards – Science with confidence throughout this course.**



Learn more about Pre-AP Biology at preap.org.