Pre-AP Biology and Mississippi College- and Career-Readiness Standards for 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 Mississippi College- and Career-Readiness Standards for 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

### Discipline Highlights

- **Overall, the alignment between the Pre-AP Biology Course Framework and the Mississippi College- and Career-Readiness Standards for Science is very strong.**
- **All five strands of the Mississippi College- and Career-Readiness Standards for Science are addressed in full or in part by the Pre-AP course framework.**
- **The majority of the Mississippi College- and Career-Readiness Standards for Science are strongly aligned to the Pre-AP Biology Course Framework.**

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

- Cells as a System
- Reproduction and Heredity
- Adaptations and Evolution

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

- Energy Transfer
- Interdependence of Organisms and Their Environments

**Discipline Highlights**

- While the overall alignment between the Mississippi CCRS for Science and the Pre-AP Biology Course Framework is very strong, there are some expected areas of partial alignment or gaps in alignment due to the differences in the level of specificity for some topics.

- The Mississippi science standards at times include greater specificity than the Pre-AP Learning Objectives. For example, MS standard BIO.1E.3 asks students to develop and use models to explain the role of the cell cycle. The Pre-AP Biology Course Framework asks students to relate the processes of cell growth and reproduction in multicellular organisms, but does not specify the development and use of models.

- Similarly, Mississippi standard BIO 5.1 asks students to “illustrate levels of ecological hierarchy, including organism, population, community, ecosystem, biome, and biosphere.” The Pre-AP Biology Course Framework does not ask students to illustrate these levels of ecological hierarchy, but does ask students to describe the classifications of aquatic and terrestrial biomes, taking factors of organisms, populations, community, ecosystem, and biosphere into account.

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

Learn more about Pre-AP Biology at preap.org

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