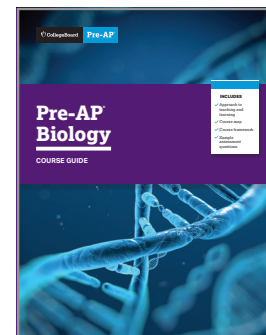




# Pre-AP Biology and North Carolina Science Essential Standards: Alignment Summary

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 Biology Course Framework and the North Carolina Science Essential 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

### NC Science Learning Standards:



- Structure and Functions of Living Organisms
- Ecosystems
- Evolution and Genetics
- Molecular Biology

### Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Biology Course Framework and the North Carolina Science Essential Standards for Biology is very strong.
- ✓ Across the 4 strands of NCES Biology, the majority of standards are fully addressed by the Pre-AP course framework.
- ✓ All the standards in the NCES strands Molecular Biology and Ecosystems are fully addressed by the Pre-AP course framework.
- ✓ The majority of standards in the NCES strands Structure and Function of Living Organisms and Evolution and Genetics are fully addressed by the Pre-AP course framework.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Biology Course Framework and the North Carolina Science Essential Standards for Biology 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 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.

## Discipline Highlights



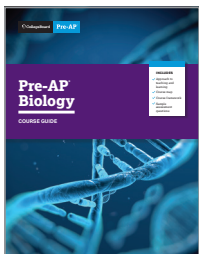
While the overall alignment between the North Carolina Science Essential Standards for Biology and the Pre-AP Biology framework is very strong, there are a few areas of partial alignment due to the more granular nature of some of the NCES for Biology.



Pre-AP intentionally focuses on a prioritized set of concepts, so some topics are not a focus of the Pre-AP course. For example, NCES Bio.1.2.3 specifies a focus on “unicellular organisms” when explaining how cell adaptations help cells survive. The Pre-AP framework, however, focuses on the organism’s response to external stimuli in their environments. While the broader concept is addressed in Pre-AP LO CELLS 4.2(a), “Describe the benefits associated with tropisms and/or taxes in organisms in response to an external stimulus,” it doesn’t specifically address unicellular organisms.

## 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 North Carolina Science Essential 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 North Carolina Science Essential Standards for Biology with confidence throughout this course.**



Learn more about Pre-AP Biology at [preap.org](https://preap.org)