



Mr. Silluzio
AP Biology Lesson Plan
Date:

Topic: Histone Protein association DNA

Summary: Within the scope of the sophomore biology course, students learn that DNA is associated with certain family of protein called histones. That level of information included little else. AP students who will soon move on to study gene transcription and gene regulation must understand that not all genes in all cells are available for transcription. Students will learn during this lesson and several that follow, that histone proteins play critical roles in both structure and processes.

Goals/Objectives:

- Understand that histone proteins are associated with DNA
- Understand that histone proteins facilitate the condensing and unwinding of DNA in response to the cells needs.
- Understand that not all genes are available for transcription due to their association with types of chromatin.
- Differentiate between euchromatin and heterochromatin.

Standards:

[Corresponding Curriculum](#)

Time Required: ½ 80 minute period

Prerequisite Knowledge:

Basic understanding that DNA is associated with proteins.

Homework: Students asked to read again the portion of CH13 (Campbell) relevant to histone protein/structure and the chromosome.

Accommodations:

Notes, resources and enrichment material are available on a class webpage.