

Mr. Silluzio
Biology Lesson Plan



Course: Biomedical Science

Topic: HIV Life Cycle

Corresponding Curriculum

Summary:

Much of today’s lesson will be consumed by whole class instruction. Students will be asked to have a vocabulary list (partially completed) while general instruction is reviewed and new material is discussed. Despite the group’s strong understanding of genetics, new terms will be used to tell the story of HIV life cycles on a cellular and molecular level.

Goals/Objectives:

Students will be able to

- Begin to use advanced vocabulary to understand and discuss the life cycles of viruses, specifically, the HIV virus.
- Understand that viruses do not meet the criteria for life and require host cells in order to replicate.
- Understand that viruses are comprised of nothing more than nucleic acids proteins and that any associated membrane material is derived only from previously infected host cells.

Prerequisite Knowledge: Advanced understanding of gene transcription, gene regulation, protein synthesis and protein structure and function.

Time Required: 80 mins

Sequence of Events: Students will participate in whole class instruction before spending some unstructured time completing a vocabulary assignment and considering a variety of high profile human viruses for research.

Time	Teacher activity	Student activity
45 Mins	Whole class instruction – viruses general and HIV Life cycle	Refer to vocabulary sheet for note taking
10 mins	Alert students to and discuss a list of viruses for research project.	Consider research topics.

20 Mins	Discuss with students individually – Research topics.	
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Homework: Continue to read Chapter 17 (Campbell in focus 2nd ed)

Lesson evaluation: Students should be engaged in this discussion. Questions will be asked that are relevant to their prior studies in genetics and protein structure/function.

Student assessment:

- Students will be assessed on their ability to use new vocabulary within the context of virology and specifically HIV life cycles

Accommodations: All class notes exist online in ppt and Adobe.

Materials, equipment and supplies: Vocabulary list

Safety concerns: None