

MICR 432: Human Virology

This course will begin with the description of diseases that turned out to be caused by viruses, such as cancer and AIDS, from antiquity to the present. This will lead to the methods of discovery of viruses, their general properties, modes of infection and propagation, genetics and evolution, viral pathogenesis, and host defense. This will be followed by a consideration of select viruses and diseases in organ systems, such as respiratory tract, nervous system, blood-borne infections, and sexually transmitted infections.

Learning Objectives

- Acquire fundamental and practical knowledge of virology and human viral infections
- Discuss how viruses infect some hosts and not others, including the diverse mechanisms of infection that viruses employ
- Consider why some infections become epidemic, while others remain self-limiting
- Illustrate viral reproduction strategies and host-defense strategies
- Identify gaps in our knowledge of virology and consider why it is so difficult to control viral infections

Credits: 2

Class Type: Graduate Course

Prerequisites:

College degree; knowledge of biology or consent of the instructor.

Program: Immunology and Microbiology

Availability Spring 2022