



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
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Battling with Infectious Diseases

Guide for Curriculum Unit 15.04.06
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This unit is designed for high-school biology students enrolled in grade 10 and can be adapted and implemented in grades 11-12, in the anatomy and physiology curriculum. The focus of the unit is to engage students in the inquiry-based scientific process through laboratory investigations and content knowledge as outlined in the curriculum with an emphasis on Connecticut standards. In accordance with Standard D32, students will be able to describe how bacterial and viral infectious diseases are transmitted and will also become informed about and able to explain the roles of sanitation, vaccination and antibiotic medication in the prevention and treatment of infectious diseases. The duration of the full unit will be about two weeks.

To accommodate the many different learning styles in my classes, my goal is to incorporate a variety of teaching strategies encompassing laboratory activities, class discussions, research work, and class presentations. The unit also offers students the choice of integrating the arts in their unit assessments. STEM learning, as well as English, will be highlighted throughout this unit enforcing critical-thinking skills, argumentation, scientific literacy, interpretation of data and formulating conclusions based on scientific evidence.

Students will explore scientific investigations that model transmission and spread of an infectious disease, gain an understanding of how disease is transmitted into their bodies and hopefully become advocates of the importance of good hygiene, living a healthy lifestyle, and avoiding harmful pathogens and microorganisms.

(Recommended for Biology, grade 10; Health, grades 7-12)

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