



# YALE NATIONAL INITIATIVE

*to strengthen teaching in public schools®*

Curriculum Units by Fellows of the National Initiative  
2014 Volume VI: Microbes Rule!

---

## **Microbes Rule the School and the Entire Planet**

Guide for Curriculum Unit 14.06.01, published September 2014  
by Phil H. Carver

This curriculum unit includes a brief background on microbes, the human microbiome and the interactions of microbes with humans and the entire planet. Microbes really do rule the planet, as they contribute to our climate, the composition of our atmosphere, the digestion of our food and even our human genome. I teach an integrated 8<sup>th</sup> grade science class which covers just about all of the science disciplines. This unit is a five day unit which can be dispersed throughout the year, or can be used for a testing review at the end of the year. There are five activities described in detail, along with teaching strategies and methods. All my activities include reading, observation, and analytical writing. An annotated bibliography and instructions on how to implement a Socratic seminar are included. I incorporated the Socratic seminar because I wanted to provide this as a strategy about how to emphasize the microbe unit. I teach a diverse population of students in a high-needs school and I believe this unit will help assist teachers and students to make connections with topics such as probiotics, infectious diseases, and the human microbiome.

(Developed for Infectious Diseases, Microbiology, Evolution, Biotechnology Careers, Ecology, and Food and Energy, grade 8; recommended for Integrated Science, grade 8)

---

<https://teachers.yale.edu>

©2023 by the Yale-New Haven Teachers Institute, Yale University, All Rights Reserved. Yale National Initiative®, Yale-New Haven Teachers Institute®, On Common Ground®, and League of Teachers Institutes® are registered trademarks of Yale University.

For terms of use visit [https://teachers.yale.edu/terms\\_of\\_use](https://teachers.yale.edu/terms_of_use)