

# Microbiology Skill Module

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Microorganisms are ubiquitous---from hot springs to the poles! Although you are probably more familiar with pathogens, most microbes function to sustain life by nitrogen fixation & nutrient recycling. In this skill module you will learn techniques for isolating microorganisms from your environment and how to isolate a colony from a lab-grown strain of microbes.

The first part of the skill module we will collect water, soil, and clinical (maybe) samples from around campus and attempt to isolate & identify distinct colonies using the 3-Phase Streak technique. Isolating microbes is challenging---most species have yet to be discovered simply because we are unable to isolate them in the lab. In order to obtain a wider range of species for observation, we will use several different types of media.

For the second part of the skill module we will learn to isolate a single strain of a microorganism from a prepared plate. It is necessary to isolate a uniform strain of a microorganism so that you may conduct further analysis on the organism.

You will return after an overnight incubation and will observe the two plates you streaked. Sign-up sheets for this skill module will be posted throughout the semester. On the day of this skill module, you will be given a small exercise to be turned in for grading.