**MCB2010L –Microbiology Lab**

**Week 1: Brightfield Microscopy**

* Types of Microscopy:
  + Light microscope
    - Compound microscope – the one we use in this lab
    - Stereomicroscope – also known as a dissecting scope
  + Electron microscope
    - TEM
    - SEM
* Familiarize yourself with the parts and functions of light compound microscope
* Familiarize yourself with use, care, and storage
* Focus
  + Resolution/Resolving power/Numerical aperture
  + Magnification
  + Contrast
  + How to increase resolution
* Oil immersion lens (100X) \*\*\*\*\*never let Hi Dry (40X) touch the oil\*\*\*\*\*

**Exercise 2: Bacterial shape**

* Identify basic shape of bacteria
  + Cocci; diplococci, staphylococci, streptococci
  + Bacilli; single rod or chain (streptobacilli)
  + Spiral; curved rod, spirilla, spirochetes

**Activitites**

1. Students take out the microscope, study parts and functions, learn how to clean, store, and most important, how to focus.
2. work on focusing starting with 4X, 10X, 40X, and 100X. Check with the instructor to show your work.
3. View the remaining of the slides.