

## Student Learning Outcomes

At the completion of this exercise students should be able to:

1. competently use a compound light microscope to examine specimens with the scanning (4X objective; 40X total magnification), 100X (total magnification) objective, and high dry objectives (400X total magnification).
2. demonstrate the basic skills of light microscopy
  - a. properly place slide on microscope stage
  - b. use the mechanical stage controls to move the slide and specimen over the light source
  - c. use the coarse and fine adjustment knobs to achieve proper focus of the specimen at each magnification
  - d. adjust light levels passing through the specimen at each magnification using the iris diaphragm, and other light controls to achieve the best image quality
3. prepare a wet mount
4. identify the parts of the microscope and describe their function
5. explain the principles and terminology related to microscopy, such as magnification, resolution, depth of field, parfocal, and field of view
6. clean, properly carry and store the microscope