Bi 213 Lab Lab Topic 14: Protists and Fungi Spring 2010

Notes:

- Your major question for today is: "What characterizes these groups of Protists and Fungi?"
- All drawings and sketches must be completed on plain white paper. Make your drawings large and detailed enough to be *useful* to you.
- You have a lot of work to do today. Work through the procedures first, using your time to make drawings and learn about the groups of organisms. Then go back and answer questions and complete table 14.5 when you have time (in or out of lab). Most materials will be out all week if you need them to answer the lab questions.
- Today you will set up a plant competition experiment, using a separate handout.

Complete in lab:

- Finish Lab 13:
  - Observe results for 13.3-A. Describe the diversity of microbes in your culture dish and those of your classmates. Complete table 13.4.
  - Observe results for 13.4-A and 13.4-B. Determine which antibiotics, antiseptics, and disinfectants were effective against which kinds of bacteria. Which antiseptics and disinfectants were most and least effective? Compare your group's results against those of your classmates. Enter results into tables 13.5 and 13.6.
- Exercise 14.1 (draw the organisms indicated with a *)
  - Study A: Use prepared slides of **Trypanosoma*.
  - Study B: Observe living cultures (or prepared slides if living cultures fail us) of **Paramecia* (a ciliate) and prepared slides of **Ceratium* (a dinoflagellate). ***Observe both, draw one.***
  - Study C: Observe large, preserved specimens of brown algae. Record descriptions of **two** in Table 14.2.
  - Study D: Use prepared slides of *Foraminifera and *Radiolarians. ***Observe both, draw one.***
  - Study E: Use prepared slides of **Amoeba*, observe the living slime mold if available.
  - Study F: Observed preserved specimens of red algae. Record descriptions of **two** in Table 14.3
  - Study G: Draw living **Spirogyra*. Observe prepared green algae. Record descriptions of **two** in Table 14.4
- Exercise 14.2
  - Study B: Observe large preserved specimens. Sketch the overall form a fungus in this group. Use slides to find the *asci (reproductive structures). Label the diagram when you have time.
  - Study C: Observe large preserved specimens. Sketch the general form of a fungus in this group. Use slides to find the *basidia (reproductive structures).
  - Study D: Observe specimens on the side bench.
  - Study E: Observe specimens on the side bench. Sketch the difference between the three growth forms of lichens: *foliose, *crustose, and *fruticose.

Complete for homework (on your own paper):

- Drawings of organisms and structures indicated with a * above
- Tables 14.2, 14.3, 14.4, 14.5, and 14.6 except Zygomycota and Deuteromycota row
- Discussion questions on:
  - p 362 –discussion questions 1-9
  - p 367 procedure questions 6 and 8
  - p 367 discussion questions 1 & 2.
  - p 369 single discussion question.
  - p 371 single discussion question.
- Apply your knowledge questions 2 and 3 page 378

Homework is due next week at the start of lab. Please type you're your homework and either recreate tables in MS Word or photocopy completed tables from your lab book. DO NOT TEAR OUT PAGES.