

Dr. Vaughan's BIO 212 Lab Syllabus, Summer 2011

There are two (2) lab sections this summer, both taught by Dr. Vaughan:

Lab 1: meets MonWed in Halsey 120 from 3:00-5:00 pm.

Lab 2: meets TueThu in Halsey120 from 3:00-5:00 pm.

Plan for lab to take the full two hours. We rarely go overtime so long as students arrive informed and prepared. We will do our best to have lab and lecture topics synchronized, but this cannot be guaranteed.

YOU MUST WEAR A NAME TAG DISPLAYING YOUR LAST NAME & FIRST INITIAL DURING EVERY LAB. Example: for Jane Doe, write Doe, J. Lettering to be at least 1" high.

Mon and Tue sessions will be the same lab exercise; then I must change the lab to the next exercise for the Wed and Thu sessions.

There can be no "makeup" labs, not even for documented emergency excuses. The reason for this is fairness. Because labs are torn down after every Tue and Thu lab session, Lab 2 students never have a chance to make up any lab, so in fairness I cannot offer that option to Lab 1 students, either.

GRADING FOR LAB:

What I want to see from my students in lab is:

#1 PREPAREDNESS; you bring along all the listed materials for the day's lab **INCLUDING YOUR NAME TAG**; you know what you are going to do when you arrive; you aren't just reading today's exercise for the first time (and holding your teammates back from efficient work as a result).

#2 PARTICIPATION; you twiddle the knobs of the instruments AND serve as a human subject each week, you ask questions, you clean up.

#3 QUIZ PERFORMANCE; you demonstrate that you have learned something in lab and have retained it for a few days.

Every lab is worth 50 points; times 12 labs, that's a total of 600 lab points.

- For labs without quizzes, your entire grade is based on preparedness and participation (P&P).
- For labs with quizzes, P&P is 25% while Quiz score is 75%.
- Missing a lab without a documented medical or bereavement excuse means you lose all the points for that lab.

There are 12 scheduled lab exercises this summer. Starting with the 3rd lab, *i.e.* for 10 of the 12, lab will begin with a brief quiz over the previous week's lab. If you arrive late, you will not get any extra time to make up the quiz.

Your final lab grade will display on D2L and is worth 30% of your Bio 212 letter grade.

LAB SAFETY AND RULES:

1. **Food, gum, and drink are prohibited from the lab classroom.**
2. **Dress code: pin up hair, minimal jewelry and body art (particularly metal), close-toed shoes, loose comfortable (but not revealing) clothing.**
3. ***HUMAN* blood will NOT be used in this class, but human urine will be.**
4. **Arrive on time and don't expect to leave early. We've made every effort to ensure a worthwhile experience in lab that makes the best use of your time (and ours). We will probably NOT go over time in any of the labs, but there is always that possibility.**
5. **Read the lab activity (posted on D2L) ahead of time so that you are prepared for the topic and activities.**
6. **You'll often work in pairs or small groups.**
7. **Wash your hands before leaving the lab each day.**
8. **Some of our experiments involve mildly hazardous procedures or reagents. You are expected to understand and follow all safety precautions as they will be written out for you in your lab exercise.**
9. **You are to clean up the lab before leaving. That includes washing dishes and wiping the bench tops. Follow instructions given by your Instructor.**

LAB SUPPLIES:

- ✓ **Lab handouts** will be posted on D2L Content as pdf files. It is your responsibility to print them out. This Syllabus tells you what lab materials to bring to each lab. SEE BELOW.
- ✓ **Lab notebook:** a narrow 3-ring binder is probably the best choice for holding your lab materials.
- ✓ **Pen or pencil** for making notes and taking quizzes.
- ✓ **Name tag** displaying last name, first initial.

BRING NAMETAG TO EVERY LAB & WEAR IT START TO FINISH.

The Labs, in order, will be:

June 13-14: No lab.

June 15-16 “HIT THE GROUND RUNNING”: a lecture/discussion that covers a number of vital BIO 105 concepts. This is because BIO 212 assumes that its students remember BIO 105 concepts, yet many students do not and thus start the class way behind, never catching up. This “lab” is our way of getting everyone off to the best possible start. We will also show you how to take lecture exams in the All-That-Apply scantron format. **No quiz.**

Bring to lab:

1. “What You Already Know” posted on D2L Content
2. “Hit the Ground Running” posted on D2L Content
3. “Practice Exam” posted on D2L Content

June 20-21 “OSMOSIS & CELL VOLUME REGULATION”: Osmosis & Cell Volume Regulation. **No quiz.**

Bring to lab:

1. “Osmosis & Cell Volume” posted on D2L Content.
2. “Units of Measure” posted on D2L Content.
3. “Physiological Standards” posted on D2L Content.

June 22-23 “HEMATOLOGY I”: **15 min QUIZ 1 over previous lab.**

Bring to lab:

1. “How To Use A Microscope” posted on D2L Content.
2. “Hematology I” lab exercise posted on D2L Content.

June 27-28 “HEMATOLOGY II”: **15 min QUIZ 2 over previous lab.**

Bring to lab:

1. “How To Use A Microscope” posted on D2L Content.
2. “Hematology II” lab exercise posted on D2L Content.

June 29-30 “BIOELECTRICITY & SLEEP”: **15 min QUIZ 3 over previous lab.**

Bring to lab:

1. “Bioelectricity & Sleep” lab exercise posted on D2L Content.

July 4-5: No lab (but lecture DOES meet on July 5!)

July 6-7 “MUSCLE PHYSIOLOGY”: **15 min QUIZ 4 over previous lab.**

Bring to lab:

1. “Muscle Physiology” lab exercise posted on D2L Content.

July 11-12 “CARDIAC PHYSIOLOGY I”: 15 min QUIZ 5 over previous lab.

Bring to lab:

1. “Cardiac Physiology I” lab exercise posted on D2L Content.

JULY 13-14 “CARDIAC PHYSIOLOGY II”: 15 min QUIZ 6 over previous lab.

Bring to lab:

1. “Cardiac Physiology II” lab exercise posted on D2L Content.

July 18-19 “RESPIRATORY PHYSIOLOGY”. 15 min QUIZ 7 over previous lab.

Bring to lab:

1. “Respiratory Physiology” lab exercise posted on D2L Content.

July 20-21 “URINALYSIS”. 15 min QUIZ 8 over previous lab.

Bring to lab:

1. “Urinalysis” lab exercise posted on D2L Content
2. Full bladder.

July 25-26 “IMMUNOLOGY”. 15 min QUIZ 9 over previous lab.

Bring to lab:

1. “Immunology” lab exercise posted on D2L Content.

July 27-28: No lab (but lecture DOES meet both those days!)

Aug 1-2 “DISORDERS OF SEXUAL DEVELOPMENT” 15 min QUIZ 10 over previous lab.

Bring to lab:

1. “Sexual Development” lab exercise posted on D2L Content.

There will be questions on the Final Exam that cover today’s lab.