

# Chemistry 227

## General Chemistry Laboratory

### SYLLABUS - Summer 2007

**Text:** Bauer, Birks, Sawyer, Laboratory Inquiry in Chemistry, 2nd edition, Brooks--Cole, and **Lab Packet** (available from Clean Copy, On Broadway).

**Prelab Exercises:** Prelabs are included in the lab packet. You should answer these questions before coming to lab. Pre-labs are due at the **beginning** of the lab period. You must prepare prior to coming to lab.

**Materials:** You will need chemical splash safety goggles. These are available from the stockroom (a \$6.50 package) or the bookstore. You will need a notebook (not loose paper) for recording data. *You are responsible for all laboratory equipment checked out to you.* You are responsible for all the equipment in your lab drawer. If you break any equipment you will need to replace it. Upon return of broken parts you will pay the cost of the equipment up to \$5.00. Your laboratory fee pays the cost of equipment broken, after that \$5.00 deductible.

**Grading:** The laboratory is graded on a Pass/No Pass basis. An average of 75% is required to pass. Credit will be given for all parts of project work. Grade will be based in part on individual work and in part on group work. Pre-labs will be worth 10% of the total grade.

Laboratory reports are due at the beginning of the lab period following completion of the experiment. Lab reports should be typed. Late reports will be docked 15 points per day late. **Failure to complete the CPR assignment will result in a NP grade. Contact Dr. Cooper to discuss makeup work.**

**Attendance:** **Attendance in this lab is mandatory.** There are no make-up labs. If you have to miss a lab for some valid reason you should inform your TA. **If you have more than one absence your grade will be a NO PASS.** *An incomplete grade is not possible in laboratory courses where registration is required to reserve a space to work.*

NOTE: If you are more than 15 minutes late to lab you will be marked late. Two late arrivals during the term will be counted as a missed lab. If you are chronically late you will be given a NO PASS.

### CPR dates:

Text entry begins: June 20<sup>th</sup>

Text entry ends/reviews begin: June 28<sup>th</sup>

Reviews/assignment ends: July 6<sup>th</sup>

**Note: The summer schedule is somewhat fluid through Ch 227, 228 and 229. Lab instructors may adjust the schedule forward, please note any changes announced.**

Chemistry 227  
General Chemistry Laboratory  
Schedule – Summer 2007

**Labs labeled “Exp #” are in the lab packet. Labs labeled “Investigation #” are in the lab manual.**

LAB 1 June 18

Check-in.

Announcements and registration adjustments.

Investigation 1: Safety in the Lab p.6

LAB 2 June 19

Investigation 2: What’s in the Flask? p. 19

LAB 3 June 21 (**Report sheet form Inv. 2 due**) (*CPR alert*)

Investigation 3: How Should Data Trends Be Presented? p. 23

LAB 4 June 25 (**Report 1 due**)

Experiment 1: Alkali Metal Project - Simple Weight Loss

Experiment 2: Alkali Metal Project - Gravimetric Analysis

LAB 5 June 26 (Lab Packet)

Experiment 2: Alkali Metal Project - Gravimetric Analysis

Experiment 3: Alkali Metal Project - Titration

LAB 6 June 28 (Lab Packet) (**Report 2/3 due**) (*CPR alert*)

Investigation 6: How Can Waste Be Made Useful? p. 35

LAB 7 July 2 (Lab Packet) (**Report 4 and Inv 6 Report Sheet**)

Atomic Emission Spectra

LAB 8 July 3 (Lab Packet) (**Report Sheet for Spectra lab due**)

Investigation 16: What Factors Affect the Intensity of Color? p. 71

LAB 9 July 5 (**Report sheet for Inv. 16 due**) (*CPR alert*)

Electron Density Explorations - online assignment

(Check-out if necessary)

**July 9 Electron Density Lab Due**

Labs experiments will be done in pairs. **Lab reports MUST be written individually.** Information about the specific requirements for each lab report is in the lab packet.

Late Work: Reports are due at the **beginning** of the indicated laboratory period. Reports will be docked 15 points for each calendar day they are late.