

Instructor: Lu Kang, Ph. D.

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Office: E-181

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Office ☎: 678-915-3276

Office ⌚: T 2:30 – 5:30 pm; W 9:00 – 11:50 am

I keep an open door policy. Students are always welcome to drop by my office (E-181) for help!

TEXT: Experiments in General Chemistry, 2nd Ed., by Duff and Gabrielli, Tavener Publishing Co., Anderson, SC.

GRADING POLICY: **A: 90 – 100 B: 80 – 89 C: 70 – 79 D: 60 – 69 F: < 59**

Your grade will be evaluated based upon your performance in the lab and your understanding of the practice of experimental chemistry. The lab grade will be determined from your lab data sheets, lab reports, technique and preparation, MSDS information as follows:

Technique & preparation: 15%

Lab reports: 70%

Lab Practical Test: 15%

Attendance is required. Repeated absences will cost your points and result in a failing grade.

Technique & Preparation:

This will be determined by punctuality, pop-quizzes, conduct, and your lab skills. Pre-lab and post-lab pop-quizzes may be given at the beginning of any lab. No extra time will be given to late students. The pre-lab quizzes are designed to encourage you to read the experiment before your coming to lab. MSDS information concerning the hazards and modes of absorption of the reagents to be used may be included. MSDS can be accessed at NIOSH Pocket Guide to Chemical Hazards

<http://www.cdc.gov/niosh/npg/npgname-a.html> or Google the compound name and look around. Post-lab quizzes will deal with the experiment you just turned in. These are to ensure you fully understand the lab and are not just using your partner's brain. **THE LOWEST QUIZ GRADE WILL BE DROPPED.**

Lab Data Sheets:

Data should be recorded in ink (NOT ERASABLE) as it is obtained. Data should be corrected by crossing it out with a single line (not scribbling). Do not use correction fluid (White-Out) or correction tape. **The data must be initialed by a laboratory instructor or TA before you leave.**

Lab Reports:

The lab report sheets are in your lab book. You are encouraged to attach supplement pages such as tables prepared on a word processor and, especially, graphs prepared using Excel or Cartesian graphic paper. Calculations and conclusions should be done in pencil to avoid messy corrections. **SHOW YOUR WORK step by step** to ensure you get full credits. You may attach separate work sheets if necessary. Note that each student must turn in each report. While your data will be the same and you may work on your reports together, your report and associated tables or graphs should not be copied from anyone else! Up to 100% may be deducted for plagiarized reports.

Laboratory Conduct:

Follow the instructions by instructor or TA at all times concerning both experimental & safety related procedures. Violation of the former will cost points; violation of the latter will result in expulsion from the lab with a zero grade for the experiment. A second expulsion will result in a failing grade for the course. **Points may be taken off from your T&P grade as an individual or as a class as a whole for failing to clean up.**

Honesty:

SPSU has an Honor Code and a new procedure relating to when academic misconduct is alleged. All students should be aware of them. Information about the Honor Code and the misconduct procedure may be found at <http://spsu.edu/honorcode/>.

TENTATIVE LAB SCHEDULE (Spring 2013)

Subject to changes! You are responsible for keeping up with changes in experiments which will be announced in class or lab. Contact me regarding changes if you miss a class or a lab.

| Week | Date | Exp. | Description |
|------|-------|------|--|
| 1 | 01/09 | --- | Check-in, Safety, and Regulations |
| 2 | 01/16 | 1 | Laboratory Measurements |
| 3 | 01/23 | 2 | Separation of a Mixture |
| 4 | 01/30 | 3 | Empirical Formula of a Compound |
| 5 | 02/06 | 4 | Percent Yield: Synthesis of Aspirin |
| 6 | 02/13 | 5 | Acid/Base Titrations |
| 7 | 02/20 | 6 | Chemical Reactions |
| 8 | 02/27 | 7 | Determination of Absolute Zero Temperature |
| | | 8 | Determination of Gas Constant |
| 9 | 03/05 | --- | Spring Break |
| 10 | 03/12 | 9 | Molecular Weight of an Unknown Gas |
| 11 | 03/19 | 11 | Enthalpy of Formation of Magnesium Oxide |
| 12 | 03/26 | 12 | Redox Titration |
| 13 | 04/02 | 13 | Absorption Spectroscopy |
| 14 | 04/09 | --- | No Lab |
| 15 | 04/16 | 15 | Molecular Geometry and Bonding; Clean-up and Check Out |
| 16 | 04/23 | --- | Lab Practical Test |

Due Date: Lab reports will be due at the very beginning of the next lab. Up to 20% points might be deducted for lab reports turned in after the beginning of a lab. Under ordinary circumstances, NO LABS WILL BE ACCEPTED MORE THAN 15 min. AFTER THE BEGINNING OF LAB. The lowest lab grade will be dropped.

STUDENT HEALTH SERVICES:

Health Services provides service for minor illnesses. A nurse is on duty (8:30 am – 5:00 pm) Monday – Friday in the Recreation and Wellness Center. Please call ☎: **678-915-7366** for help.

DISABILITY STATEMENT:

Students with disabilities who believe that they may need accommodations in this class or laboratory are encouraged to contact the Disability Service Coordinator, **Kalista Thomas**, via ☎: **678-915-7244** ASAP to ensure that such accommodations are implemented in a timely fashion. Information on Disabilities Services can be found at http://www.spsu.edu/attic/Dis_Svcs.html.

CAMPUS EMERGENCY MANAGEMENT:

If something serious happens on campus, please call CAMPUS SAFETY ☎: **Ext. 5555** via campus IP phones whenever the campus network is available. Otherwise, you can always call ☎: **678-915-5555** or ☎: **770-528-5555** to reach CAMPUS SAFETY. Note: the SPSU campus safety officers can always find you, reach you, and help you quicker than anyone else.