

## Chemistry 2 – General Chemistry Laboratory Spring Semester 2008 Schedule\* Room G3 Schrenk Hall

Monday 1:00-4:00pm – Sections A1, A2, B1, B2

Tuesday 8:00-11:00am – Sections C1

Tuesday 2:00-5:00pm – Sections E1, E2

Wednesday 1:00-4:00pm – Sections G1, G2, H1

Thursday 2:00-5:00pm – Sections J1, J2

**Students: Please read this carefully. Keep this sheet for reference.**

Lab Date	Experiment	Page #	Due Date
Jan. 14,15,16,17	1. Safety / Check-In / MSDS	1-12	Jan. 28,29,30,31
<b>Jan. 21,22,23,24</b>	<b>NO LAB – Martin Luther King Jr. Birthday Week</b>		<b>N / A</b>
	<b>2. Homework: Dimensional Analysis Problem Set #1</b>	13-22	Jan. 28,29,30,31
Jan. 28,29,30,31	3. Zinc & Statistics	33-52	Feb. 4,5,6,7
Feb. 4,5,6,7	4. Empirical Formula** & DA #2&3	53-64, 22-26	Feb. 18,19,20,21
Feb. 11,12,13,14	5. Ternary Mixture	65-83	Feb. 18,19,20,21
Feb. 18,19,20,21	6. Mystery of 13 Test Tubes	85-94	Feb. 25,26,27,28
<b>Feb. 25,26,27,28</b>	<b>Mid-Term Exam (Covers Labs 1-6, MSDS, Safety)</b>		<b>N / A</b>
Mar. 3,4,5,6	7. Radioactivity***	7.1-6	Mar. 17,18,19,21
<b>Mar. 10-13</b>	<b>Spring Recess</b>	---	<b>N / A</b>
Mar. 17,18,19,21	8. Heat of Neutralization	12.1-5	Mar. 31, Apr. 1,2,3
<b>Mar. 24-27</b>	<b>Spring Break</b>	---	<b>N / A</b>
Mar. 31, Apr. 1,2,3	9. Antacid Analysis & DA #4&5	6.1-6, 26-32	Apr. 7,8,9,10
Apr. 7,8,9,10	10. Colorimetry**	8.1-5	Apr. 14,15,16,17
Apr. 14,15,16,17	11. Atomic Spectra	9.1-10	Apr. 21,22,23,24
Apr. 21,22,23,24	12. Gas Chromatography	11.1-5	Apr. 28,29,30, May 1
Apr. 28,29,30, May 1	13. Gas Laws	10.1-4	May 5,6,7,8
<b>May 5,6,7,8</b>	<b>Final Exam / Check-Out (Labs 7-13, MSDS, Safety)</b>		<b>N / A</b>
<b>May 12-16</b>	<b>No Laboratory – Final Exam Week</b>	---	<b>N / A</b>

\***Chem 4:** Students who have not already passed and received credit for Chemistry 4 – Introduction to Laboratory Safety and Hazardous Materials, are required to take and pass Chem 4 at the beginning of the semester. However, do not wait for completion of Chem 4 before attending the above scheduled Chem 2 labs.

\*\***Formal Reports:** These two labs will involve writing formal reports. This is discussed further on the back.

\*\*\***Lab Packets:** Lab Packets must be purchased prior to the Radioactivity experiment. They may be purchased for \$7.00 from the Chemistry Office – Room 142 Schrenk Hall.

**Safety Goggles (ANSI Z87.1):** According to the laws of the State of Missouri, safety goggles *must* be worn at all times while working in the laboratory. Failure to wear safety goggles while in the laboratory may result in your removal from the laboratory. Students *must* obtain appropriate safety goggles prior to the first lab (Jan. 28-31, 2008) and bring them to that lab and all subsequent labs.

**Appropriate Attire:** You must have closed-toe shoes. You must wear long pants or long skirts or wear a lab apron.

**Chem 2 Information** is available at the following website: <http://www.mst.edu/~tbone/Subjects/TBone/Chem2.html>

## Objectives

By the end of this course, you should be able to:

1. Have increased your knowledge of chemistry and laboratory principles.
2. Apply mathematical and statistical equations to solve chemical problems.
3. Evaluate chemical problems and design appropriate chemical procedures to solve those problems.

## Behavioral Expectations

For this class, you are expected to:

1. **Show respect** for your fellow students, your faculty & staff, and yourself.
2. **Be in the lecture hall**, ready for class at the scheduled time.
  - a. Have **completed laboratory reports, lab books, pen, calculator, UMR id, goggles** and any other specified material with you and ready to use.
  - b. You will also need: **paper towels, dishwashing liquid, and matches.**
3. **Complete Materials Safety Data Sheets (MSDS).**
  - a. Prior to doing any of these experiments, you will be required to sign a form indicating that you have read and understood the hazardous materials involved in each of these experiments. You can determine the hazards of each material involved in a given experiment by going to the Chem 2 website, <http://web.mst.edu/~tbone/Subjects/TBone/Chem2.html> where copies of the MSDS can be found.
4. **Turn in weekly lab reports.** When turning in your lab reports, please refer to the following:
  - a. Each student must turn in original work.
  - b. Write your name, section number, and date in the top right hand corner.
  - c. Complete lab reports. These are due at the beginning of the class, the week following the experiment. (Formal lab reports will be given two weeks for completion.)
  - d. **Late work will be accepted.**
    1. Penalty for late lab reports: 2 points will be deducted if the report is not turned in at the beginning of the hour; 2 points will be deducted each day after that for the 1<sup>st</sup> week.
    2. Penalty for late formal reports: 4 pts will be deducted if the report is not turned in at the beginning of the hour; 4 pts will be deducted each day after that for the 1<sup>st</sup> week.
    3. Lab reports that are more than one week late will need to be turned into Dr. Bolon (as opposed to the TA) with a written explanation of why they are late.
5. **Complete Prelab Quizzes.**
  - a. A quiz over the reading assignment will be given at the beginning of each class.
  - b. If you arrive after all of the quizzes have been turned in, then you will receive a zero for the quiz.
  - c. If you arrive after all of the quizzes have been turned in, then you need to check in with a TA to verify your attendance; otherwise you will be counted absent for the day.
6. **Attend the lecture** at the beginning of each lab.
  - a. If you do not attend the lecture portion, you will not be allowed to attend the lab portion of the class and you will receive a zero for that lab report.
7. **Notify both your TA & Dr. Bolon if you are going to be absent.**
  - a. Notify them as soon as you become aware of an expected event which will cause you to be absent or as soon after an unexpected event as possible.
  - b. Absences are excused for officially sanctioned MS&T trips – athletic competitions, conferences, etc. Alternate arrangements will be made for missed labs. If you are unable to make-up a lab during the scheduled week, the missed lab and corresponding quiz(zes) will not count against your final grade. Missed exams will need to be rescheduled and should be completed as soon as possible.
  - b. For illness. You are required to go to Student Health or have a doctor's note, if you want an excused absence. Students who do not have a confirmed illness will receive an unexcused absence.
  - c. Unexcused absences will receive a zero for the day's assignments.

## Grading Procedures

*The following grading system will be used to determine the grades in Chemistry 2.*

10 Laboratory Reports (50 pts each)	500 pts
2 Formal Laboratory Reports (100 pts each)	200 pts
12 Lab Quizzes (15 pts each)	180 pts
MSDS – Signed and Returned	40 pts
Dimensional Analysis Homework	80 pts
Midterm Exam*	200 pts
<u>Final Exam*</u>	<u>300 pts</u>
Total Points	1500 pts

\*Midterm Exam, Final Exam and final grades may be curved. This is to compensate for any variance in grading standards used by the graders of the different sections. The grading scale is as follows: 90-100% = A, 80-89.5% = B, 70-79.5% = C, 60-69.5% = D, <59.5% = F.

If you have any questions during the semester, please do not hesitate to contact me at [bolonc@mst.edu](mailto:bolonc@mst.edu) anytime or you may call: 341-4439. If I am not available when you call, I will return your call as soon as possible.