Chemistry 2 – General Chemistry Laboratory

Fall Semester 2006 Schedule*

Room G3 Schrenk Hall

Monday 1:00-4:00pm – Sections A1, A2, B1, B2 Tuesday 8:00-11:00am – Sections C1, C2, D1, D2 Tuesday 11:00am-2:00pm – Sections E1, E2, F1, F2 Tuesday 2:00-5:00pm – Sections G1, G2, H1, H2 Wednesday 1:00-4:00pm – Sections J1, J2, K1, K2 Wednesday 6:00-9:00pm – Sections T1, T2, U1 Thursday 8:00-11:00am – Sections L1, L2, M1, M2 Thursday 11:00am-2:00pm – Sections N1, N2, P1, P2

Thursday 2:00-5:00pm - Sections Q1, Q2, R1, R2

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

Lab Date	Experiment	Lab #	Due Date
Aug. 21,22,23,24	Safety / Check-In / MSDS	380	Aug. 28,29,30,31
Aug. 28,29,30,31	1. Density & Statistics	353	Sep. 11; Sep. 5,6,7
Sep. 4	NO LAB – Labor Day		N / A
Sep. 5,6,7	2. Zinc Coating Thickness	909	xxx, Sep. 12,13,14
Sep. 11	2. Zinc Coating Thickness**	909	Sep. 18
Sep. 11,12,13,14	3. Empirical Formula	386	Sep. 18,19,20,21
Sep. 18,19,20,21	4. Ternary Mixture	375	Sep. 25,26,27,28
Sep. 25,26,27,28	5. Antacid Analysis***	Packet	Oct. 16,17,18,19
Oct. 2,3,4,5	Mid-Term Exam (Covers Labs 1-5,	, MSDS, Safety)	N / A
Oct. 9,10,11,12	6. Periodic Properties	635	Oct. 16,17,18,19
Oct. 16,17,18,19	7. Radioactivity	Packet	Oct. 23,24,25,26
Oct. 23,24,25,26	8. Colorimetry	Packet	Nov. 6,7,8,9
Oct. 30,31 Nov. 1,2	9. Atomic Spectra	Packet	Nov. 6,7,8,9
Nov. 6,7,8,9	10. Gas Laws	Packet	Nov. 13,14,15,16
Nov. 13,14,15,16	11. Gas Chromatography	Packet	Nov. 27,28,29,30
Nov. 20-24	Thanksgiving Break		N / A
Nov. 27,28,29,30	12. Heat of Neutralization	368	Dec. 4,5,6,7
Dec. 4,5,6,7	Final Exam / Check-Out (Labs 6-1	2, MSDS, Safety)	N / A
Dec. 11-15	No Laboratory – Final Exam Week		N / A

^{*}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.

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 (August 28-31, 2006) 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.

^{**}Labor Day: Due to a scheduling conflict with Labor Day, students in Monday Sections (A1, A2, B1 & B2) will be completing both Zinc Coating Thickness and Empirical Formula Labs on Sep. 11.

^{***}Lab Packets: Lab Packets must be purchased prior to the Antacid Analysis experiment. They may be purchased for \$6.00 from the Chemistry Office – Room 142 Schrenk Hall.

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.** Turn in weekly lab reports. When turning in your lab reports, please:
 - a. Write your name, section number, and date in the top right hand corner.
 - b. Completed lab reports are due at the beginning of the class, the week. following the experiment. (Formal lab reports will be given two weeks for completion.)
 - c. Late work will be accepted.
 - 1. Penalty for late lab reports: 5 pts will be deducted if the report is not turned in at the beginning of the hour; another 5 pts will be deducted each day after that.
 - 2. Penalty for late formal reports: 5 pts will be deducted if the report is not turned in at the beginning of the hour; 10 pts will be deducted each day after that.

4. 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.
- **5.** 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.

6. Complete Post Lecture Quizzes.

a. A quiz may be given after the lecture to review laboratory expectations.

7. Complete Materials Safety Data Sheets (MSDS).

a. Prior to doing most experiments, you will be required to sign a form indicating that you have read and understood the hazardous materials involved in that experiment. You can determine the hazards of each material involved in a given experiment by going to the Chem 2 website, http://web.umr.edu/~tbone/Subjects/TBone/Chem2.html where copies of the MSDS can be found.

8. 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 UMR 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 (35 pts each)	350 pts
2 Formal Laboratory Reports (75 pts each)	150 pts
13-25 Lab Quizzes (5-10 pts each)	125 pts
MSDS – Signed and Returned	25 pts
Midterm Exam*	150 pts
Final Exam*	200 pts
Total Points	1000 pts

^{*}Midterm Exam, Final Exam and final grades will 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 <u>bolonc@umr.edu</u> anytime or you may call: 341-4439. If I am not available when you call, I will return your call as soon as possible.