Chemistry 2 – General Chemistry Laboratory*

Fall Semester 2012 – Tentative 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 2:00-5:00pm – Sections J1, J2, K1, K2
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	Page #	Due Date
Aug. 20,21,22,23	1. Check-In / Glassware / Graphing / MSDS	*Handouts*	Aug. 27,28,29,30
	Safety	1-14	" "
	Significant Figure Problem Set #1 & #2	35-52	" "
Aug. 27,28,29,30	2. Zinc & Statistics	53-76	Sep. 10,11,12,13
Sep. 3,4,5,6	***NO LAB – Labor Day Week***	**---**	**N / A**
	3. *Homework*: Nomenclature Review	*Handouts*	Sep. 10,11,12,13
	Dimensional Analysis Problem Set #1	15-24	" "
Sep. 10,11,12,13	4. Empirical Formula & DA #2&3	77-94, 24-28	Sep. 17,18,19,20
Sep. 17,18,19,20	5. Ternary Mixture	95-116	Sep. 24,25,26,27
	Oxidation/Reduction	*Handouts*	" "
Sep. 24,25,26,27	6. Mystery of 13 Test Tubes	117-130	Oct. 8,9,10,11
Oct. 1,2,3,4	***Mid-Term Exam (Covers Labs 1-6 & MSDS, Safety)***		**N / A**
Oct. 8,9,10,11	7. Gas Laws **	Ch #7	Oct. 15,16,17,18
Oct. 15,16,17,18	8. Thermochemistry	Ch #1	Oct. 22,23,24,25
Oct. 22,23,24,25	9. Radiochemistry & Nuclear Decay	Ch #2	Oct. 29,30,31, Nov. 1
Oct. 29,30,31, Nov. 1	10. Antacid Analysis & DA #4&5	Ch #3; 28-34	Nov.5,6,7,8
Nov.5,6,7,8	11. Colorimetry	Ch #4	Nov. 12,13,14,15
Nov. 12,13,14,15	12. Atomic Spectra (*completed in class*)	Ch #6	Nov. 12,13,14,15
Nov. 19-23	***Thanksgiving Break*** **---**		**N / A**
Nov. 26,27,28,29	13. Dilutions/Beer's Law (*completed in class*)	Ch #5	Nov. 26,27,28,29
Dec. 3,4,5,6	***Final Exam / Check-Out (Covers Labs 7-13, MSDS, Safety)***		**N / A**
Dec. 10-14	**No Laboratory – Final Exam Week** **---**		**N / A**

***Chem 1**: Students must have previously taken, received credit for or be concurrently enrolled in Chem 1 in order to take Chem 2. If at any point you decide to drop Chem 1, you need to contact Dr. Bolon prior to having your Chem 1 instructor sign your paperwork. If at any time in the semester it is determined that you have NOT met this prerequisite you will be dropped from Chem 2.

***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. Do NOT wait for completion of Chem 4 before attending the above scheduled Chem 2 labs. If you do NOT or have NOT passed Chem 4 by September 7, 2012, then you will be dropped from Chem 2.

****Textbooks:** Page numbers correspond to **Chemistry 002 Lab Manual, 4th ed.** available at either local bookstore and must be purchased prior to the first lab (Aug. 27,28,29,30, 2012). Chapters refer to **Chem 002 Laboratory Packet 2010-2011**. Lab Packets must be purchased prior to the **Gas Laws** experiment. They may be purchased for **$10.00** 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 (Aug. 27,28,29,30, 2012) and bring them to that lab and all subsequent labs.

Appropriate Attire: You must wear closed-toe shoes. You must wear long pants or long skirts or wear a lab apron. If you are NOT dressed appropriately, you will be required to leave the lab until you are dressed appropriately.

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

Objectives

Students who successfully complete this course will be able to:

1. Demonstrate 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, MS&T id, goggles.** and any other specified material with you and ready to use.
   b. You will also need: **paper towels and colored pencils, markers or crayons**.
3. **Complete Materials Safety Data Sheets (MSDS).** **Due in class Aug. 27-30.**
   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 clicking on "MSDS Databases" will take you to reliable MSDS links.
4. **Turn in weekly lab reports**. When turning in your lab reports, please refer to the following:
   a. Each student must turn in their own original work. Original datasheets from the book must be included. *(If anyone resubmits your work as their own, you will both receive a zero for the assignment.)*
   b. Write your name, section number, and date in the space provided or in the top right hand corner.
   c. Completed lab reports. These are due at the beginning of your class session, the week indicated on the syllabus.
   d. Data must be completed in pen on the lab report prior to receiving TA signature on the day of the experiment.
   e. Lab reports where the data is completed in pencil will NOT be accepted – regardless of TA signature.
   f. **Late work will be accepted.**
      1. **ALL** late work must be turned in to the **Chem 2 Mailbox in 142 Schrenk** to receive credit. *(That means: Late reports given directly to your TA will receive zero credit.)*
      2. Penalty for late lab reports: 2 points will be deducted each day late for 5 days, excluding weekends.
      3. Lab reports that are more than one week late will need a written explanation of why they are late; however, they will still be accepted with a maximum of -10 late points.
5. **Complete Assigned Homework.**
   a. Homework may be completed in pen or pencil.
   b. Each student must show handwritten work for dimensional analysis problems. *(Answers only will receive zero credit.)*
   c. Late homework is not subject to late points. It must be turned in to the Chem 2 Mailbox in 142 Schrenk to receive credit.
6. **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.
7. **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 session.
   b. If you do attend the lab without attending the lecture and submit a lab report, it will not be accepted and you will receive a zero for that lab report.
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 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.
   c. 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.
   d. 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 Fall Semester 2012.

13 Laboratory Reports (50 pts each)	650 pts
12 Lab Quizzes (15 pts each)	180 pts
MSDS – Signed and Returned	30 pts
Homework Assignments	140 pts
Midterm Exam*	200 pts
Final Exam*	300 pts
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 anytime or you may call: 341-4439. If I am not available when you call, I will return your call as soon as possible. Thank you – Cyndie Bolon