CHEMISTRY E-1axl
SYLLABUS - FALL 2014

INSTRUCTORS:
Gregg Tucci    tucci@fas.harvard.edu    Science Ctr. 114
Justin McCarty jmccarty@fas.harvard.edu    Science Ctr. 115c
Office Hours at a time to be determined or by appointment.

HEAD LAB TEACHING FELLOW:
Joann Kim    joannkim@fas.harvard.edu
Contact Joann with any questions about the laboratory or the laboratory schedule.

COURSE DESCRIPTION:
Chemistry E-1axl is the optional companion laboratory course to the online course Chem E-1ax. This course is open only to students concurrently enrolled in Chem E-1ax, but this course is NOT required for students enrolled in Chem E-1ax. This course allows students to gain familiarity with laboratory techniques and apparatus, and to apply their knowledge of concepts from CHEM E-1ax in an actual laboratory situation. Prior to each lab, students read the lab experiment and complete a pre-laboratory report. All students must complete mandatory safety training to participate in the course, this training is provided at the first class meeting.

MEETING TIME AND LOCATION:
Labs will meet on Saturdays from 10 am to 12:30 pm in Harvard Science Center Room 212. See the Laboratory Schedule on the next page for a list of the eight dates when lab will meet.

WEBSITE:
https://canvas.harvard.edu/courses/1163

REQUIRED COURSE MATERIALS:
1. Chem E-1a General Chemistry Laboratory Manual
   Posted as PDF files on the course website. In addition, a printed and bound version is available for purchase at Flashprint (located at 99 Mt. Auburn St. in Harvard Square) for $15.

2. One pair of Safety Glasses:
   Sold at the Harvard Coop. (You MUST have the brand and model of safety glasses that is stocked by the Coop. Alternative brands or models are not acceptable.)
LABORATORY OVERVIEW:
Labs will be led by your Teaching Fellow (TF) and will allow you to gain familiarity with laboratory techniques and apparatus, as well as allow you to apply your classroom knowledge in an actual laboratory situation. Prior to each lab, students must read the lab experiment and complete the “Prelab”, which will be handed in to your TF as you enter the lab.

All students must attend each laboratory during the regularly assigned lab time on Saturday mornings at 10 am. If a conflict arises or you are sick and unable to attend your assigned lab once during the semester, you can contact the Head Lab TF, Joann Kim, and arrange to make-up the lab that same week during a regularly scheduled lab time for the course Chem E-1a. The make-up lab times available may include Monday, Tuesday, and Wednesday evenings, or Wednesday morning. If you are unable to attend a make-up lab during any of these times, please contact Joann Kim immediately. A lab that cannot be made up will receive a zero. If you miss your regularly scheduled lab time more than once during the semester, you will not be allowed to pass the course and will be encouraged to withdraw from the course.

Laboratory starts promptly at 10 am; latecomers will not be admitted to the laboratory. Additional Laboratory policies are discussed in the lab manual. Students are responsible for reading, and are expected to be aware of, all policies outlined in the lab manual.

During the first lab (Saturday Sept. 6th) the beginning of lab will include a laboratory introduction and safety training, and all students will need to complete a Safety Assessment and a Safety Agreement. Students must attend this safety training and complete the Safety Assessment and Safety Agreement before performing any laboratories. Any student who for any reason is unable to attend lab on Sept. 6th MUST attend another lab meeting that week or else attend a laboratory safety training session at 8:45 pm on Thursday September 11th. Any student unable to makeup this safety training will not be permitted to continue in the course.

LABORATORY SCHEDULE:
Labs will meet at 10 am on Saturday mornings on the following dates:

Sat. 9/6: Laboratory Safety Training and Laboratory Experiment #1
Note: Before coming to the first lab, you must read the entire laboratory introduction and safety information, complete the lab safety assessment, read Experiment 1, and complete the Prelab to experiment 1. You should bring the completed Lab Safety Assessment and Prelab with you to lab. In addition, be sure to bring your safety glasses and to wear proper laboratory attire, which includes long pants, socks, and shoes such that all skin below your waist is covered.

Sat. 9/13: Laboratory Experiment #2: Stoichiometry
Sat. 9/20: Laboratory Experiment #3: Aqueous Solutions and Reactions
Sat. 10/4: Laboratory Experiment #4: Gas Laws
Sat. 10/18: Laboratory Experiment #5: Thermochemistry
Sat. 11/8: Laboratory Experiment #6: The Eleven Solution Problem
Sat. 11/15: Laboratory Experiment #7: Molecular Models
Sat. 12/6: Laboratory Experiment #8: Introduction to Spectrophotometry
GRADING POLICY:
Each lab will be graded out of 35 points according to the following grading scheme:

- Prelab: 10 points
- Lab Report: 20 points
- Lab Safety: 3 points
- Lab Cleanup: 2 points

Total: 35 points per lab

The Prelab will be completed prior to the laboratory and handed in upon your arrival in lab. In most cases the Lab Report will be completed in lab and submitted before you leave the lab. If you are unable to complete the Lab Report before the end of the lab, you may take it with you to complete at home, and then hand it in at the beginning of the next lab. Any Lab Report not handed in by the start of the subsequent lab will receive a zero. Lab Safety and Lab Cleanup points are awarded in the lab for following all safety regulations and lab cleanup policies. Any violation of safety policies or failure to properly clean up your lab bench or the shared bench areas will result in complete loss of these points for that lab.

There will be 8 labs completed during the semester, with each lab worth 35 points. Your final average will be determined by the total points earned out of a possible total of 280 points.

This course is not graded on a curve. Your grade in this class depends only on how you do, not on how anybody else performs. We hope to encourage a spirit of cooperation rather than competition! We simply total up your grade as described above and use the following scale to assign letter grades:

- 90 – 100   A or A–
- 75 – 90   B–, B, or B+
- 60 – 75   C–, C, or C+
- 50 – 60   D
- below 50   F

The exact cutoffs for the + and – grades are left to our discretion.
(Note: Students who miss more than one lab will receive a failing grade for the course.)

PLEASE ASK US IF YOU ARE CONFUSED ABOUT ANYTHING!

Welcome to Chem E-1axl!