

General Chemistry Laboratory II (CH112) Spring 2011-2012

Time/Place:

Teaching Assistant (TA):

Office:

Phone:

Office hours:

e-mail:

Director of Labs: Prof. Lynne O'Connell
Office: Merkert Chemistry Center, Room 125D
Phone: 552-3626
e-mail: oconnell@bc.edu

Textbook and other required materials:

Laboratory Techniques for General Chemistry (Notebook), Hayden McNeil Publishing.
Safety goggles

The instructions for the Experiments that you will perform are found at the following web site:

www.bc.edu/schools/cas/chemistry/undergrad/labcourses.html

The Experiments are available in PDF format.

Grading Policy: The final grade will be calculated based on the following distribution:

70%	Laboratory reports
15%	Quizzes
15%	Laboratory performance

Reports, quizzes and performance grades are based on a 5 point scale. The final grades in the course are normalized such that the average letter grade for each Teaching Assistant's section(s) is approximately a B.

Reports

A score of (from lowest to highest) 0, 1, 2, 3, 4 or 5 is given for each individual section of the lab report, such as: pre-lab assignment, data and observations (notebook pages), results and calculations and answers to questions. Each section of the report is weighted according to its importance to the overall report, and a final numerical grade out of 5 for the lab report is calculated based on the section scores and their weighting factors. The weighting factors will differ for each lab report.

Details concerning the lab reports can be found in the Preface of the *Laboratory Techniques for General Chemistry* manual/notebook, pp 3-5. The Pre-lab Assignment is described on pages 4-5.

Quizzes

Five unannounced quizzes will be given to each lab section over the course of the semester. Each will consist of 3-5 short answer questions. The questions will pertain only to the experiment being performed on that particular day. The quiz will be administered by the TA at the beginning of the lab period, before the pre-lab presentation.

Laboratory Performance

Each student will be given a score of 0, 1, 2, 3, 4 or 5 for each of four categories comprising the lab performance grade. Each category will be weighted according to its importance, and a final numerical grade out of 5 for lab performance will be calculated based on the category scores and their weighting factors. The TA will assign the performance grade every fourth week of the semester for a total of three performance grades. The categories and their respective weightings are as follows:

Experimental technique	30%	Preparation/Understanding	30%
Dexterity		Being prepared	
Use of chemicals/reagents		Efficient use of time	
Apparatus set-up		Ability to follow instructions	
Use of instruments		Understanding concepts	
Proper recording in notebook			
Safety attitude	20%	General attitude/Independence	20%
Observance of all safety rules		Attendance	
Cleaning up spills promptly		Lack of excessive dependence on others	
Lack of clutter		Respect for others	
Cleaning up at end of lab period		Patience	
		Being on time	
		Returning equipment properly	

Laboratory Make-up Policy

If a student is absent for **one** laboratory period for *any* reason, the experiment that would have been performed and any quiz that might have been taken during that period will be considered to be "dropped" grades. A "dropped" grade is one which is not included in the calculation of the final grade. A student who does not miss any laboratory periods will have their lowest report grade and their lowest quiz grade dropped before the final grade is calculated.

If a student has excused absences for **more than one** laboratory period, the necessary make-up experiment(s) and quiz(zes) (all *except* the first missed experiment and quiz) will be arranged through the Director of Laboratories. Excuses for missed laboratory periods, such as an infirmity admission slip, letter from a doctor, notice from a coach, etc., should be submitted to the Director. **All** missed labs must be excused in order for any experiment or quiz to be made-up. Arrangements for make-up experiments must be made **within one week** following the missed lab period(s).

Note 1: Neither Experiment 12, Qualitative Analysis of Cations, nor the Open Ended Project can be used as a dropped grade. Contact the Lab Director *as soon as possible* if you miss one of these lab periods (no later than one week following the missed period).

Note 2: If a student fails to hand in a laboratory report for one experiment and later in the semester misses a laboratory period, the student will *not* be allowed to make up the missed lab period.

Notice: If at some point during the semester you decide to drop or withdraw from the lab course, you *must* return your locker key to the stockroom.

Schedule for General Chemistry Experiments for Spring 2011-2012

Week	Monday	Tuesday/ Wednesday	Thursday	Friday
1/16	*Holiday*	Check-in <i>and</i> Molecular Modeling	Check-in <i>and</i> Molecular Modeling	Check-in <i>and</i> Molecular Modeling
1/23	Check-in <i>and</i> Molecular Modeling	Expt. 12 Qual. Analysis	Expt. 12 Qual. Analysis	Expt. 12 Qual. Analysis
1/30	Expt. 12 Qual. Analysis	Expt. 12 Qual. Anal. (cont'd)	Expt. 12 Qual. Anal. (cont'd)	Expt. 12 Qual. Anal. (cont'd)
2/6	Expt. 12 Qual. Anal. (cont'd)	Expt. 12 Qual. Anal. (finish)	Expt. 12 Qual. Anal. (finish)	Expt. 12 Qual. Anal. (finish)
2/13	Expt. 12 Qual. Anal. (finish)	Expt. 13 Freezing Pt. Dep.	Expt. 13 Freezing Pt. Dep.	Expt. 13 Freezing Pt. Dep.
2/20	Expt. 13 Freezing Pt. Dep.	Expt. 14 Kinetics	Expt. 14 Kinetics	Expt. 14 Kinetics
2/27	Expt. 14 Kinetics	Expt. 15 Polymers	Expt. 15 Polymers	Expt. 15 Polymers
3/5	*Break*	*Break*	*Break*	*Break*
3/12	Expt. 15 Polymers	Expt. 16 Equilibrium	Expt. 16 Equilibrium	Expt. 16 Equilibrium
3/19	Expt. 16 Equilibrium	Expt. 17 Pot. Titration	Expt. 17 Pot. Titration	Expt. 17 Pot. Titration
3/26	Expt. 17 Pot. Titration	O. E. Project II (start)	O. E. Project II (start)	O. E. Project II (start)
4/2	O. E. Project II (start)	No lab	*Holiday*	*Holiday*
4/9	*Holiday*	O. E. Project II (finish)	O. E. Project II (finish)	O. E. Project II (finish)
4/16	*Holiday*	O. E. P. group meeting <i>and</i> Check-out	O. E. P. group meeting <i>and</i> Check-out	O. E. P. group meeting <i>and</i> Check-out
4/23	O. E. Project II (finish)	Oral Reports	Oral Reports	Oral Reports
4/30	Oral Reports <i>and</i> Check-out	No lab	No lab	*study day*