

Camosun College  
Department of Chemistry & Geoscience  
Chemistry 121-02 & 04  
Winter 2003

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Office Hours:  
Monday, Tuesday, & Wednesday 14:30-15:30  
Wednesday & Friday 12:30-13:20  
(Additional office hours: Mon, Tue, & Wed after 15:30 or by appointment.)

Prerequisite: Chemistry 120

Course Materials:

♦ “Chemistry, The Central Science” by Brown, LeMay & Bursten, 9<sup>th</sup> Ed., 2003  
--a.k.a. B-L-B. If you are using the 8<sup>th</sup> Ed. B-L-B, please pick up the 8<sup>th</sup> Ed. B-L-B  
question list with notes outline from Di. The 9<sup>th</sup> Ed. question list with notes outline are in  
Di's Sup already.

♦ Chemistry 121 Lecture Notes Supplement & Appendix by Diana Li, 2002/3 Edition;  
\$17.75 + tax.

♦ Chemistry 121 Lab Manual, Camosun College; \$8.75 + tax.  
(Safety glasses mandatory and lab coat recommended)

Lecture Plan:

Ch.	(#Lec)	
25	(10)	Organic Chemistry
14	(7)	Chemical Kinetics
5	(3)	Thermochemistry
19	(3)	Chemical Thermodynamics
15	(3)	Chemical Equilibrium
16	(4)	Acid-Base Equilibria
17	(4)	Additional Aspects of Aqueous Equilibria
20	(2)	Electrochemistry

Evaluation:

Lab (up to 10 Experiments)	20%	
Test I (Ch. 25 & 14)	20%	(Week VIII, 2.5 hours in lab)
Test II (Ch. 5, 19 & 15)	20%	(Week XII, 2.5 hours in lab)
Final Exam (comprehensive)	40%	(TBA ~Week VI, 3 hours in April)

Notes:

- (1) Students must pass the lab portion of the course to obtain credit for Chem 121.
- (2) Student is encouraged to attempt both tests. Test score that is not as high as that of the April final exam will be dropped automatically and its weight redistributed to the final exam. You may choose not to write one or both tests and have each weight redistributed to the final exam. For the gambler who misses both tests, your final exam will then be 80% of your course grade. YIKES!!
- (3) Student must write each test as scheduled for your section. No one is allowed to write late and there will be no make-up test. No exceptions.

**\*TEST DATES & LAB SCHEDULE TO BE CONFIRMED DURING THE FIRST WEEK OF CLASSES.**

Grading Scale:

A+	95-100%
A	90-94%
A-	85-89%
B+	80-84%
B	75-79%
B-	70-74%
C+	65-69%
C	60-64%
D	50-59%
F	<49%

Important Dates:Week

VI	Feb 13 & ♥ (Thu & Fri)	Reading Break
VIII	Feb 27 (Thu)	Sec 04: Test I in Lab (2.5 hours)
	Feb 28 (Fri)	Sec 02: Test I in Lab (2.5 hours)
X	Mar 10 (Mon)	Last Day to Withdraw....
XII	Mar 27 (Thu)	Sec 04: Test II in Lab (2.5 hours)
	Mar 28 (Fri)	Sec 02: Test II in Lab (2.5 hours)

Apr 14-17 & 22-25: Exam Period for Winter 2003
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Apr 18 (Fri)—Good Friday & Apr 21 (Mon)—Easter Monday

Week	Activity
I Jan 9, 10	<b>Expt. 1</b> The Preparation of XSA-Group A
II Jan 16, 17	<b>Expt. 1</b> The Preparation of XSA-Group B
III Jan 23, 24	<b>Expt. 2</b> The Analysis of an Unknown Acid
IV Jan 30, 31	<b>Expt. 3</b> The Preparation of Benzoic Acid-Group A
V Feb 6, 7	<b>Expt. 3</b> The Preparation of Benzoic Acid-Group B
VI Feb 13, 14	Thu & Fri-Reading Break
VII Feb 20, 21	<b>Expt. 6</b> The Rate of Bromination of Acetone
VIII Feb 27, 28	<b>Test I in Lab</b> (2.5 hours)
IX Mar 6, 7	<b>Expt. 10</b> Thermochemistry
X Mar 13, 14	<b>Expt. 4</b> Banana Oil
XI Mar 20, 21	<b>Expt. 8</b> The Gravimetric Determination of Chloride Ions
XII Mar 27, 28	<b>Test II in Lab</b> (2.5 hours)
XIII Apr 3, 4	<b>Expt. 9</b> Synthesis of Copper (I) Chloride
XIV Apr 10, 11	Thu & Fri Lab Sec-Review & Exam Info

Evaluation:Results ; Report

Expt. 1 XSA	/2	/8	/10
Expt. 2 Analysis of an Unknown Acid	/2	/8	/10
Expt. 3 Preparation of Benzoic Acid	/2	/8	/10
Expt. 6 Rate of Bromination of Acetone	/4	/16	/20
Expt. 4 Banana Oil	/5		/5
Expt. 10 Thermochemistry	/3	/12	/15
Expt. 8 Gravimetric Determination of Chloride	/5		/5
Expt. 9 Synthesis of Copper (I) Chloride	/5	no report	/5

(1) You are not required to hand in any prelab assignment, however, you may get a surprise lab quiz regarding the introduction & procedure at the beginning of the lab period which is weighed 2 marks, thus, reducing the weight of the lab report. This is to ensure that you will prepare ahead for each experiment.

(2) Your report should be neat & tidy, written in ink or typed on one side of paper only. Calculations may be done in pencil. The original raw data bearing Di's initial must be attached to the back of the report. You may redo or reorganize your experimental data as part of your report if you wish. Data sheets are available for a number of experiments and will be distributed a week before the experiment.

(3) All reports due on due date and time indicated on day of the experiment. Generally, all graded lab reports will be returned on Tuesday or Wednesday before the next set of reports are handed in on lab day.

**A penalty of 10% per day late (or part of) will be applied and maximum of 2 days late. Once graded reports are returned to students, any late report will be corrected but will not get a grade.**

(4) Absent from an experiment: You may be asked to make up a missed lab & lab report must be handed in by the due date. Otherwise, an "I" grade will be given for your lab work which leads to an "I" grade for the course.

(5) Perfect Lab Attendance: 1.0% will be added to your final course grade as a reward.

