Camosun College
Department of Chemistry & Geoscience
Chemistry 230 (Organic Chemistry I)
Winter 2003

Instructor: Diana Li
Office & Tel: F344C, 370-3444
e-mail: lid@camosun.bc.ca

Office Hours:

Mon, Tue, & Wed 14:30-15:30
Wed & Fri 12:30-13:20
(Additional office hours: Mon, Tue, & Wed after 15:30 or by appointment.)

Prerequisites: CHEM 120 (or CHEM 112 with a B and permission of the Chair)
Corequisite: CHEM 121

Course Materials:

- "Organic Chemistry—Structure & Reactivity" by Ege, 4th Ed., 1999; $129.75, $97.31 for used text. Study Guide optional.
- Chemistry 230 Lecture Notes Supplement & Appendix by Diana Li, 2002/3 Ed.; $20.75 + GST.
- Chemistry 230/231 Lab Manual by Raap & Khalifa; $19.75 + GST. (Safety glasses mandatory & lab coat recommended.)

Lecture Plan:

Chapter		
1	(4 lec)	Structure & Bonding
2	(4 lec)	Covalent Bonding & Chemical Reactivity
3 & 16	(4 lec)	Organic Acids & Bases
5	(4 lec & lab[a])	Alkanes & Cycloalkanes
6	(1 lec & lab[a])	Stereochemistry
7	(8 lec)	Nucleophilic Substitution & Elimination Reactions
12	(7 lec)	Alcohols, Diols, & Ethers
8 & 9	(4 lec)	Alkenes & Alkynes
21	(2 lec)	Free Radicals
11	(lab lec)[b]	IR & UV Spectroscopy, Mass Spectrometry

Distribution:

Lab	25%	(up to 5 Expt., 3 Stereo. Lab Lec[a], 3 Spec. Lab Lec[b])
Test I	15%	(Chapters 1, 2, & 3; Week VI, Tue, Feb 11, 2.5 hr.)
Test II	20%	(Chapters 5, 6, 7, & Spec (Ch. 11); Week XI, Tue, Mar 18, 2.5 hr.)
Final	40%	(Comprehensive; TBA ~Week VI, 3 hours in April)

Notes:

(1) Students must pass the lab portion of the course in order to pass the course. The six lab lectures are mandatory and attendance will count as 5% of your lab grade each time.

(2) Students must write each test as scheduled--there will be no make-up test and no exceptions. You are encouraged to write both tests. Everyone must write the comprehensive final exam in April unless you can pass the course without its 40%! Any missed test will result in its weight being automatically redistributed to your final exam. Any test score that is not better than your final exam will be dropped and weight redistributed to your final exam also. For the gambler who misses both tests, your final exam will then be 75% of your course grade. YIKES!! All test dates to be confirmed during the first week of classes.

(3) Students in both lab sections may write Test I & Test II anytime between 14:30 and 21:00 on the dates indicated—room to be confirmed. Since each test takes 2.5 hours, there will be no entry after 18:30.

FYI: DI HAS 2 CHEM 121 SECTIONS (02 & 04) IN WINTER 2003. CHEMISTRY 231 (ORGANIC CHEM II) WILL BE OFFERED IN SPRING 2003 WITH DI.

Grading Scheme:

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 11 (Tue)	Test I, 2.5 hr., anytime between 2:30 & 9 pm
	Feb 13 & ♥ (Thu & Fri)	Reading Break
X	Mar 10 (Mon)	Last Day to Withdraw.....
XI	Mar 18 (Tue)	Test II, 2.5 hr., anytime between 2:30 & 9 pm

Apr 14-17 & 22-25: Exam Period for Winter 2003

Apr 18 (Fri)—Good Friday & Apr 21 (Mon)—Easter Monday

Chemistry 230 Winter 2003 Preliminary Lab Schedule:

Week,	beginning	Activity
I	Jan 6	Organic Lab Orientation (attendance mandatory) & maximum of 2-hour review in lab—both sections
II	Jan 13	Expt. 3 Recrystallization & Sublimation
III	Jan 20	Stereochemistry Lab Lecture I
IV	Jan 27	Stereochemistry Lab Lecture II
V	Feb 3	Stereochemistry Lab Lecture III
VI	Feb 10	**Test I on Feb 11, 2.5 hours between 2:30 & 9 pm**
VII	Feb 17	Expt. 4 Separation of a Mixture by Extraction
VIII	Feb 24	Expt. 9 Relative Rates of Substitution Reactions (bring stopwatch or sport watch to lab for timing)
IX	Mar 3	Spectroscopy Lab Lecture I
X	Mar 10	Spectroscopy Lab Lecture II
XI	Mar 17	**Test II on Mar 18, 2.5 hours between 2:30 & 9 pm**
XII	Mar 24	Spectroscopy Lab Lecture III
XIII	Mar 31	Expt. 7 Isolation of (+)-Limonene from Orange Peels
XIV	Apr 7	2.5-Hour Lecture in Lab—both sections

Lab Evaluation Scheme (Lab Total = 100 marks)

Expt.					
3	**Prelab**	**/ 5**	**Product / 2**		**Report / 8**
Stereo I			**Attendance / 5**		
Stereo II			**Attendance / 5**		
Stereo III			**Attendance / 5**		
4	**Prelab**	**/ 4**	**Product / 3**		**Report / 8**
9	**Prelab**	**/ 5**	**Product & Results**	**/ 5**	**Report /20**
Spec I			**Attendance / 5**		
Spec II			**Attendance / 5**		
Spec III			**Attendance / 5**		
7			**Product & Results**	**/4**	**Report /6**

Notes:

(1) Prelabs for experiments 3, 4 and 9 are attached and are due at the beginning of each experiment. All reports due on date indicated on the day of each experiment. **Generally, all graded reports will be returned by Tuesday before the next set of reports are handed in on Wednesday.** 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 receive a grade.

(2) The quality of each product isolated in experiments 3, 4, 9, & 7 will be graded. If no product is isolated, you will get zero.

(3) Your report should be neat and tidy, written in ink or typed on one side of paper. Original raw data bearing Di's initial must be attached to the back of your report. You may redo or reorganize your experimental data as part of your report if you wish.

(4) Absent from an experiment:
Your attendance to each experiment / lab lecture is mandatory and attendance will be taken each time. You may not missed more than one attendance and if you missed a lab, you may be required to make it up and submit the lab report within a week. Otherwise an "I" grade will be given for your lab work, thus, an "I" grade for the course. If you missed a lab lecture, you will be given a score of zero out of five marks each time. Each spec/stereo lab lecture is approximately 2.5-hour long.

(5) Perfect Lab Attendance:
When you attend all experiments and lab lectures, you will be awarded a bonus of 4 marks which is 4% of the 100marks lab total or 1.0 % of the course grade.