

	<p>SCHOOL OF ARTS & SCIENCE CHEMISTRY AND GEOSCIENCE DEPARTMENT CHEM 100-003 2012 Fall</p>
---	---

A. General Information

Instructor: John Lee

Office - Fisher 344A, Phone: local 3446, twitter: *johnatcamosun*, via D2L: *john.lee16@online.camosun.ca*

E-mail: leejohn@camosun.bc.ca

Email is my preferred method of communication however any problems with course material/questions should be addressed in person.

Lectures:

Tuesday, Thursday (F360): 12.30 pm – 1.20 pm; Wednesday (Y300): 12.30 pm – 1.20 pm

Friday (F336): 12.30 pm – 1.20 pm

Lab:

Monday (F300), 12.30 pm – 2.20 pm

Office Hours: Monday 2.20 to 3.20 pm, Tuesday, Wednesday, Thursday and Friday 1.30 to 2.20 pm.

Important Dates: September 18th Fee deadline, October 8th : Thanksgiving (College closed). November Xth: Last day to withdraw without a failing grade. November 12th, Remembrance Day (College closed). December 10th - 14th Exam period.

B. Required Materials for the Course

Principal Text: CHEM 100, Course Pack, Camosun College (In-House) available in the Bookstore (cost approximately \$30)

It is essential that all students have a copy of this manual. Laboratory Safety glasses are mandatory and a lab coat is very highly recommended.

C. Course Content and Schedule

The course includes:

a) 6 in-class, 30 minute review quizzes (usually Thursdays apart from *). (September 13th, 27th, October 11th, *30th, November 8th, 22nd). Quiz dates may change at Instructor's discretion, advance notice will be given.

b) A 2 hour written midterm test in week . (Monday October 22nd)

c) A 3 hour written final examination at the end of the course on all the material in the course.

D. Summary of Lecture Material with Page References

Subject	Material Covered	Classes (approximate)	Course Notes pages (approximate)
Measurements and Calculations	Units, dimensional analysis, scientific notation, sig figs, density and energy calculations	4	1-19
Atoms, ions and molecules Mixtures, compounds and elements	Physical and chemical changes, elements, compounds and mixtures, The atom, isotopes, ions, periodic table	4	29-44
Naming compounds	Chemical Formula and names, naming molecular and ionic compounds	4	49-67
The Mole	Molecular mass, % composition, converting grams to moles to number of molecules	4	74-87
Stoichiometry	Balancing chemical equations, limiting reactants, % yields and heat of reactions	6	93-115
Periodic table and electron distribution	Electron shells and orbitals for the first 20 elements, ionization energy and chemical properties. Atomic spectra	4	120-139
Gases	Kelvin scale, Gas volume and temperature, gas volume and pressure, partial pressure, gas stoichiometry	6	170-184
Liquids and Solutions	Solution stoichiometry and concentrations	4	191-213
Organic Chemistry	Hydrocarbons, naming simple alkanes, structural isomers	4	221-240

Notes

1. There are recommended worksheets for each chapter. These worksheets will not be graded. The worksheets will be distributed in class and can also be found on the course D2L site.

2. The midterm test will be on material covered in the half of the course. It will take place on Monday October 22nd in F300.

3. The in class quizzes will be on material covered in the previous week(s). They will be given at

the start of class, answers will be given after the quiz.

E. Basis of Student Assessment (Weighting)

The course mark will be derived in the following manner:

6 Quizzes	(3% each) = 18 %
1 Midterm test	18 %
Final	39 %
Laboratory work	25 %

If it is advantageous to the student the theory mark will be solely derived from the final examination, or the combination of midterm/quiz and final.

In the event of a quiz or midterm test being missed due to illness/other, the weight of the missed quiz/test will be carried over to the final exam.

F. The Laboratory Mark

Students must **complete a minimum of 6 of the Labs** and score a **minimum of 50%** on the Labs to pass the course **NO EXCEPTIONS**. If no reason for missing a lab class is supplied, either by email or in person, a mark of zero will be given for the missed lab.

The lab mark is based on attendance and the laboratory report. A student that attends the laboratory class but does not present a written report will receive a score of 50%.

Students are responsible for obtaining their own safety glasses. Laboratory jackets are available from the bookstore and are recommended, especially if the student is to pursue further chemistry courses.

G. The Grading System

Grading System, Standard (GPA)

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at camosun.ca for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. <i>(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of course completion.)</i>
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

1. You must score a minimum of 50 % on laboratory work to be permitted to take the final exam and participate in at least 6 of the lab classes.
2. You must pass both the **lecture portion and the laboratory portion** in order to pass the course.

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services and on the College web site in the Policy Section.

John Lee Fall 2012 Lab Schedule:**Chem 100 (003) – Mondays, 12:30-2:20 am in Fisher 300**

Week Number	Experiment	Date:
I September 3rd	No class - Labour Day	Monday Sept. 3th
II September 10th	Lab Safety: Attendance Mandatory	Monday Sept. 10th
III September 17th	Experiment 1: Density measurements	Monday Sept. 17th
IV September 24th	Experiment 3: Separating mixtures	Monday Sept. 24th
V October 1st	Experiment 4: Heat of Combustion	Monday October 1st
VI October 8th	No Class - Thanksgiving	Monday October 8th
VII October 15th	Experiment 5: Recycling Copper	Monday October 15th
VIII October 22nd	Midterm Test	Monday October 22nd
IX October 29th	Experiment 7: Copper and Silver Nitrate	Monday October 29th
X November 5th	Experiment 9: Chemical Reactivity	Monday November 5th
XI November 12th	No Class; Remembrance Day	Monday November 12th
XII November 19th	Experiment 13: Synthesis of Asprin	Monday November 19th
XIII November 26th	Experiment 14: Preparation of some common substances	Monday November 26th
XIV December 3rd	No Lab - Review	Monday December 3rd

In the event of missing the Lab Safety presentation students are responsible for watching the (30 minute) safety DVD, available from the technician's office prior to their first experiment.