CAMOSUN COLLEGE	***SCHOOL OF ARTS & SCIENCE*** ***CHEMISTRY AND GEOSCIENCE DEPARTMENT*** **CHEM 120-03** **College Chemistry 1** **2017W**

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/chem.html

Ω   *Please note: this outline will be electronically stored for five (5) years only.*
   It is strongly recommended students keep this outline for your records.

1.   Instructor Information

Instructor:	Diana Li
Office Hours:	Mon 14:30-16:20, Wed, Thu, & Fri 14:30-15:20, or by appointment.
Location:	F344C
Phone/Email:	250-370-3444; lid@camosun.bc.ca
Website:	http://camosun.ca/learn/programs/chem.html

To avoid class interruptions & cancellations, please refrain from wearing fragrance or other strongly scented products to class!

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

Upon completion of this course the student will be able to:

1.   Utilize nomenclature rules to name ionic and covalent compounds.
2.   Demonstrate an understanding of stoichiometry by balancing chemical equations and performing mathematical calculations involving chemical reactions.
3.   Describe the electronic structure of any atom in the periodic table and apply it to explain many of the physical and chemical properties of the elements.
4.   Utilize simple bonding theories to explain why elements combine to form the compounds they do and also to explain many of the properties of compounds.
5.   Apply knowledge of intermolecular interactions to rationalize many important physical properties of bulk matter in the gas, liquid and solid phases.
6.   Use standard chemistry lab equipment, including burets, pipets, Buchner filters, and volumetric glassware in the correct manner.
7.   Perform many standard laboratory procedures, such as titrations, preparation of standard solutions, the preparation, isolation, and purification of compounds, as well as use spectrophotometers to make analytical measurements.

3.   Required Materials

Texts	"Chemistry, The Central Science: a broad perspective" by Brown et al., 2014—a.k.a. 3rd Australian Custom Edition.
Other	♦Chem 120 Lecture Notes Supplement & Appendix by D. Li, Fall 2015 Ed. This supplement goes with both 2nd & 3rd Australian editions of BLB but the 3rd Australian edition is preferred. Note: Your Chem 121 instructor is not obligated to accommodate the 2nd edition, and homework questions selected from both editions are not necessarily identical or equivalent. ♦Chem 120 Lab Manual ♦Darling Molecular Model Kit—recommended if you are taking Chem 121 and other 2nd year Chemistry courses (Chem 230, 231, etc.) ♦Eye protection is mandatory & lab coat is recommended in the lab!

4. Course Content and Schedule

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Lecture Plan:
   Chapter        Topic (approximate number of lecture hours)
3rd Ed.[2nd Ed.]
2-4    [1-3]      Review of Selected Topics (9)
10     [9]        Gases (3-4)
6      [5]        Electronic Structure of Atoms (7-8)
7      [6]        Periodic Properties of the Elements (3)
8      [7]        Basic Concepts of Chemical Bonding (3-4)
9      [8]        Molecular Geometry & Bonding Theory (3 + lab lecture)
11     [10]       Intermolecular Forces, Liquids & Solids (3)
12     [11]       Solutions (3)
13     [20]       Chemistry of the Environment (3)
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5. Basis of Student Assessment (Weighting)

Labs (up to 9 experiments)	22%
Test I (Review & Preview Materials)	13% (Week V Lab Period; 2.5 hours)*
Test II (3rd Ed.-Ch. 10 & 6)	20% (Week XI Lab Period, approx. 3 hours)*
Final Exam (comprehensive)	45% (TBA~Week V, 3 hours in April)

Notes:
   (1) Student must pass the lab portion of the course to obtain credit for Chem 120. Your lab faculty will go over the lab component of Chem 120 and lab evaluation with you…
   (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. However anyone who is caught cheating will receive zero for that test which will not be redistributed. For anyone who misses both tests, your final exam will then be 78% of the course grade.
   (3) Student must write each test as scheduled for his/her section. No one is allowed to write late and there will be no exceptions. Early exam is a privilege and not a right, thus, at full discretion of the instructor.

   * Test dates to be confirmed during the first week of classes in January.

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

Standard Grading System (GPA)

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	*Incomplete*: 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	*In progress*: 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. *(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of course completion.)*
CW	*Compulsory Withdrawal:* 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.

7. Important Dates

Week
V   **Test I in F356:** Feb. 7 (Tue) 18:00-20:30, i.e. Tue evening lab period.
VI   Family Day: Feb. 13 (Mon)—College Closed
        Reading Break: Feb. 14-17 (Tue-Fri).
X   Mar 13 (Mon): Last Day to Withdraw or Change to Audit…
XI   **Test II in F356:** Mar. 21 (Tue) 18:00-20:50 i.e. Tue evening lab period.
XIV   Good Friday: Apr. 14 (Fri)—College Closed

April 18 (Tue): First Day of Exams for Winter 2017

8.   Recommended Materials or Services to Assist Students to Succeed Throughout the Course

Hard copies of the 1st, 2nd, & 3rd Australian Editions of B-L-B are available in the Library Reserve Room.

Note: Short answers to all red numbered exercises are at the back of the text, and a hard copy of the Solutions Manual for the 1st Australian Edition is in the library. Answers to red & black numbered exercises are available from Di & she will email the 3rd edition answers to everyone. Please email Di if you need the 2nd edition answers.

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.

Students may not use recording devices in the classroom without the prior permission of the instructor. However, the instructor's permission is not required when the use of a recording device is sanctioned by the College's Resource Centre for Students with Disabilities in order to accommodate a student's disability and when the instructor has been provided with an instructor notification letter which specifies the use of a recording device. Recordings made in the classroom are for the student's personal use only, and distribution of recorded material is prohibited.