



CAMOSUN COLLEGE
School of Arts & Science
Department of Chemistry & Geoscience

CHEM-120-D02 & D03
College Chemistry 1
Winter 2021

COURSE OUTLINE

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

Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

Instructor: Diana Li

Office Hours: Minimum of three 50-minute Collaborate Sessions per week designated for Chem 120 which will be revised as needed to maximize utilization. Instructor's timetable will be updated & provided each time revision occurs.

Office/Phone: Fisher 344C/250-370-3444 (Instructor is working remotely, please email her.)

Email: lid@camosun.bc.ca

Website: <http://camosun.ca/learn/programs/chem.html>

2. Intended Learning Outcomes

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

Text	The \$115 package of Mastering Chemistry with eBook "Chemistry, The Central Science: a broad perspective" Access Code from the Bookstore: https://www.camosuncollegebookstore.ca/buy_access_codes.asp
Other	◆ Chem 110 Lab Manual —available on D2L or via email & scientific calculator ◆ Technological Requirements: http://camosun.ca/services/orientation/online-learning.html

4. Course Content and Schedule

Week	Lecture Activities
I	Review & Preview Part I
II	Review & Preview Part II
III	Review & Preview Part III
IV	Test I (Review & Preview Parts I-III) during Week IV lab period.
V	Ch. 10 Gases
VI	Family Day (Mon, Feb. 15) & Reading Break
VII	Ch. 6 Electronic Structure of Atoms Part I
VIII	Ch. 6 Electronic Structure of Atoms Part II
IX	Ch. 7 Periodic Properties of the Elements
X	Ch. 8 Basic Concepts of Chemical Bonding
XI	Test II (Ch. 10 & Ch. 6) during Week XI lab period.
XII	Ch. 9 Molecular Geometry & Bonding Theories
XIII	Intermolecular Forces & Ch. 12 Properties of Solutions
XIV	Final Exam Preparation

5. Basis of Student Assessment (Weighting)

Labs (up to 10 virtual experiments)	22%
Test I (Review & Preview Parts I-III)	13% (Week IV Lab Period, ~2.5 hours)*
Test II (Units 3 & 4)	20% (Week XI Lab Period, ~2.5 hours)*
Final Exam (comprehensive)	45% (TBA ~ Week VI, 3 hours in April)

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

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. Students are required to check their emails (the email address associated with his/her Camlink profile must be up to date) and D2L regularly.
3. Each test will be emailed to students (or loaded on D2L) and students will be writing remotely. 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!
4. **Student must write each test during the lab period as scheduled for his/her section. No one will be allowed to write late and there will be no makeup test, no exceptions.**

6. Grading System

- Standard Grading System (GPA)
- Competency Based Grading System

7. Recommended Materials to Assist Students to Succeed Throughout the Course

8. College Supports, Services and Policies



Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence, Student Ancillary Fees, Academic Integrity, Grade Review & Appeals, Student Misconduct and Academic Accommodations for Students with Disabilities and Student Penalties and Fines.

School of Arts & Science Academic Honesty Guidelines

<http://camosun.ca/learn/school/arts-science/images/Arts%20and%20Science%20Academic%20Honesty%20Guidelines.pdf>

A. GRADING SYSTEMS <http://camosun.ca/about/policies/index.html>

The following two grading systems are used at Camosun College:

1. 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		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. 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 at <http://camosun.ca/about/policies/index.html> 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 are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
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.