



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

CHEM-070-D03
College Prep Chemistry
Fall 2020

COURSE OUTLINE

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

Ω 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

(a) Instructor	David Stuss
(b) Office hours	Monday, Wednesday, Thursday 3:30 – 4:30 <i>or by appointment</i>
(c) Location	(F350A) – <i>Office hours will be held online via Collaborate</i>
(d) Phone	(250) 370-3438 Alternative: _____
(e) E-mail	stussd@camosun.bc.ca

2. Intended Learning Outcomes

CHEM 070 encompasses the Core Topics for Chemistry: Advanced Level (11) outlined in the 2018-2019 BC ABE Articulation Handbook. Upon successful completion of this course a student will be able to:

- Obtain the prerequisite body of knowledge and skills that will provide a basis for further academic and career / vocational education and training
- Demonstrate an awareness of chemistry in everyday life
- Demonstrate an awareness of chemistry in solutions to environmental challenges
- Apply scientific method to investigate phenomena
- Communicate effectively using the language of chemistry
- Carry out all duties in an ethical, professional manner, including the collection and treatment of data
- Work independently and also as part of a team, where appropriate
- Handle equipment and chemicals in a safe and effective manner with regard to personal safety and the safety of others

3. Required Materials

- (a) CHEM 070 Coursenotes & Problem Sets / Lab Manual (2019) - *Available online (D2L)*
- (b) Scientific calculator
- (c) Internet Access – *Lectures, labs & tutorials all conducted online. Computer preferred*

4. Course Content and Schedule

Locations & Times

	Time	Location
Lecture	Monday - Thursday 2:30 –3:20 PM	Online via D2L
Lab (Virtual)	Tuesday 3:30 – 5:20 PM	Online via D2L

Lecture Plan

Unit	Topic	Unit	Topic
1	Measurements & Calculations	6	Periodic Table & Electron Distributions
2	Introductory Terminology	7	Chemical Bonding
3	Chemical Formulas & Names	10	Organic Chemistry
4	Calculations Based Upon Formulas	9	Liquids & Solutions
5	Stoichiometry	11	Radioactivity (Optional)

Lectures & homework exercises will follow the coursepack at a pace of approximately 2/3rds unit per week.

Lab & Exam Schedule

Week	Lab Date	Lab No.	Lab Name
1	8 Sep	-	Safety Orientation
2	15 Sep	1	Density
3	22 Sep	2	Identifying Liquids
4	29 Sep	3	Separating Mixtures
5	6 Oct	-	Test 1
6	13 Oct	5	Recycling Copper
7	20 Oct	6	The Fe / CuSO ₄ Reaction
8	27 Oct	7	The Cu / AgNO ₃ Reaction
9	3 Nov	-	Test 2
10	10 Nov	8	Water of Hydration
11	17 Nov	9	Chemical Reactivity
12	24 Nov	12	Neutralization
13	1 Dec	-	Test 3
14	8 Dec	-	Review

5. Basis of Student Assessment (Weighting)

Labs (8)	15%
Quizzes (~1 per week)	10%
Participation	5%
Midterm Tests (3 x 15%)	45%
Final Exam (comprehensive)	25%

1. To write the final exam you must achieve a minimum final score of **50%** on laboratory work.
2. You must pass **both** the lecture portion and the laboratory portion in order to pass the course.
3. There will be no make-up quizzes or midterm test. The weight a missed midterm test will be reassigned to the final exam.
4. Lab exercises will primarily involve watching videos and working through the lab exercise. Lab reports will be completed during the lab period and can be submitted online by the end of the day.

6. Grading System

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

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

The Camosun Student Success Centre offers many support services including online Learning Skills Guides, Learning Circles, and one-one-one appointments. Students are encouraged to explore what is available here: <http://camosun.ca/services/writing-centre/learning-skills.html>

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 and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

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.