



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

CHEM-070-004
College Prep Chemistry
Fall 2019

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	Daniel Dönnecke	_____
(b) Office hours	Th 10:30 am – 11:30 am	_____
(c) Location	TBA	_____
(d) Phone	250 370 4447	Alternative: _____
(e) E-mail	donnecked@camosun.bc.ca	_____
(f) Website	_____	_____

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)	Text: Coursepack (Mandatory)	<i>Chemistry 070 Course Notes, Lab Manual, and Problem Sets, 2019 Edition.</i> Camosun College Publications.
(b)	Safety Glasses (Mandatory)	Bookstore has "UVEX" safety eyewear – please check if using others

(c)	Lab coat (Recommended)	Bookstore has cloth coats available – please check if using another type
(d)	Covered Footwear (Mandatory)	Exposed feet (e.g. sandals, flip-flops) are not permitted in the lab during experiments
(e)	Scientific Calculator (Recommended)	Available in bookstore. Smartphones / PDAs or similar devices cannot be used during testing or labs.

4. Course Content and Schedule

Locations & Times

	Time	Location
Lecture	Tuesday 8:30 – 10:20	Fisher Building, Room F212
	Thursday 8:30 – 10:20	Fisher Building, Room F212
Lab	Monday 10:30 AM – 12:20 PM	Fisher Building, Room F300

Lecture Plan

Unit	Topic	Unit	Topic
1	Measurements & Calculations	7	Chemical Bonding
2	Introductory Terminology	10	Organic Chemistry
3	Chemical Formulas & Names	8	Gases
4	Calculations Based Upon Formulas	9	Liquids & Solutions
5	Stoichiometry	11	Radioactivity
6	Periodic Table & Electron Distributions		

Lectures & homework exercises will follow the course pack at a pace of approximately one unit per week.

Lab & Exam Schedule

Week	Lab Date	Lab No.	Lab Name
1	2 Sep	-	<i>Labour Day, College closed</i>
2	9 Sep	1	<i>safety in the lab AND Density</i>
3	16 Sep	2	Identifying Liquid Compounds
4	23 Sep	3	Separating Mixtures
4	26 Sep	-	Term Test 1
5	30 Sept	4	Heat of Combustion
6	7 Oct	6	Recycling of Copper
7	14 Oct	-	Thanksgiving, College closed
8	21 Oct	7	The Cu / AgNO ₃ Reaction
8	24 Oct	-	Midterm Exam
9	28 Oct	9	Chemical Reactivity
10	4 Nov	10	Volume of a Gas
11	11 Nov	-	Remembrance Day, College closed
12	18 Nov	11	Molar Volume of a Gas
12	21 Nov	-	Term Test 2
13	25 Nov	12	Acid Base Neutralization
14	4 Dec	-	Review

5. Basis of Student Assessment (Weighting)

Labs	20%
Term Tests	20%
Midterm Exam	20%
Final Exam (comprehensive)	40%

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 term tests or midterm exam. The weight of a missed term test / midterm will be reassigned to the final exam.

The Laboratory Mark

The lab mark is based on participation and the laboratory report. A student that participates in a laboratory class without completing the lab report will receive a minimum score of 50% on that lab (a report must still be submitted).

Students must be present for the introductory Lab Safety Talk in the first lab class before they can begin any experiments. In the event of missing the Lab Safety Talk students are responsible for watching the (30 minute) safety DVD, available from the technician's office prior to their first experiment.

Wearing of **safety goggles** is **mandatory** in all labs. Students who forget safety goggles will not be allowed to complete the lab.

Punctual attendance in all the lab periods is mandatory. There are **NO EXCEPTIONS** other than an official doctor's note. Missed labs without adequate reasons will result in a mark of zero for that lab. **Permissions for an exception must be documented by email permission from the instructor and by submitting the doctor's note.**

Laboratory reports can usually be completed in-class but are otherwise due one week late (i.e. at the beginning of the following lab period). The lab manual has been designed to allow students to hand in the completed pages taken directly from the manual. Labs are done in pairs although each lab partners is expected to share equally in experimental work, calculations and the write up. The submission of one lab report per group (with the name of both students written on the report) is sufficient but if lab partners wish to hand in individual reports I will grade them individually.

6. Grading System

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	<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. (For these courses a final grade will be assigned to either the 3 rd 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. 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 and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.