

COURSE OUTLINE

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

Please note: the College electronically stores this outline for five (5) years only.
It is strongly recommended you keep a copy of this outline with your academic records.
You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

| (a) | Instructor: | Steve McKinnon | | |
|-----|---------------|-------------------------|--------------------|--|
| (b) | Office Hours: | | | |
| (C) | Location: | F344B | | |
| (d) | Phone: | 250-370-3446 | Alternative Phone: | |
| (e) | Email: | mckinnons@camosun.bc.ca | | |
| (f) | Website: | | | |

2. Intended Learning Outcomes

(<u>No</u> changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

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

- 1. Work safely in a college chemistry laboratory.
- 2. Operate equipment and instruments associated with basic synthetic and analytical chemical methods.
- 3. Perform chemistry experiments at the first-year university level.
- 4. Write reports on chemical experiments in the correct format and critically discuss experimental data.

3. Required Materials

- (a) Texts none
- (b) Camosun College Chem 116 Laboratory Manual, Neil Meanwell Ed.

4. Course Content and Schedule

(This section can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

Lab meeting time Wednesdays, 6:30pm to 9:20pm

- 1. Introduction: Safety in the Chemistry Laboratory
- 2. The Densities of Liquids and Solids
- 3. Stoichiometry of Chemical Compounds
- 4. The Spectrophotometric Determination of Nickel in Aqueous Solution
- 5. Determination of Copper using Atomic Absorption Spectroscopy
- 6. Molar Mass Determination of an Unknown Solute using Freezing Point Depression
- 7. Preparation and Isolation of Banana Oil (Isopentyl Acetate)
- 8. A Simple and a Fractional Distillation of an Ethanol-Water Mixture
- 9. The Rate of Bromination of Acetone
- 10. pH Measurements and the Determination of pKa of Acetic Acid
- 11. Thermochemistry

5. Basis of Student Assessment (Weighting)

(This section should be directly linked to the Intended Learning Outcomes.)

(a) Assignments N/A

- (b) Quizzes N/A
- (c) Exams N/A
- (d) Laboratory 100%

6. Grading System

(<u>No</u> changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College 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 | В | | 5 |
| 70-72 | B- | | 4 |
| 65-69 | C+ | | 3 |
| 60-64 | С | | 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 | <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. |

7. Recommended Materials or Services to Assist Students to Succeed Throughout 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 <u>camosun.ca</u>.

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 the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED