



COURSE OUTLINE

1. Instructor Information

- (a) Instructor: Alan Gell
- (b) Office hours: 13:30-14:20 Mon-Thurs
- (c) Location: F 344B
- (d) Phone: 370 3446
- (e) E-mail: gella@camosun.bc.ca

2. Intended Learning Outcomes

After successfully completing all components of this course students will be able to:

1. Identify a sample as an element, compound or mixture
2. Determine whether a transformation is chemical or physical
3. Convert numbers from scientific notation to normal notation
4. Express answers to calculations to the correct number of significant figures
5. Arrange a group of elements in order of increasing atomic radius or ionization energy
6. Write the electron configuration for an atom
7. Draw dot diagrams for molecules and ions
8. Name binary ionic compounds
9. Name binary covalent compounds
10. Write formulae for named elements and compounds
11. Write chemical equations
12. Balance chemical equations by inspection
13. Classify reactions
14. Calculate theoretical yield of products from grams or moles of reactants
15. Solve limiting reactant problems
16. Do mass and mole conversions
17. Determine molecular formulas
18. Assign oxidation states
19. Determine whether a reaction is an oxidation-reduction reaction or not
20. Determine energy changes in chemical reactions.

3. Required Materials

- (a) Texts: Chemistry 060 Notes (Camosun)
Chemistry 060 Lab Manual (Camosun)
- (b) Other **Safety Goggles. These are essential in the lab**

Course Content and Schedule

Instruction

Lectures: Monday, Wednesday 14:30 – 15:50; Tues, Thurs 13:30-17:20 F214

Labs: Monday, Wednesday 16:00 – 17:20 F354

Introduction

Matter and energy

Measurements

Elements, atoms, periodic table

Atomic structure

Names and formulas of inorganic compounds

Periodic properties of elements

Chemical bonds

Chemical quantities

Chemical reactions

Stoichiometry: calculations based on chemical equations

Gases

Liquids and solutions

Radioactivity

Organic Chemistry

5. Basis of Student Assessment (Weighting)

(a) Assignments Labs 20%

(b) Exams
Test 1, test 2, test 3, each 15%
Final 35%

6. Grading System

The following percentage conversion to letter grade will be used:

A+ = 95 - 100%

A = 90 - 94%

A- = 85 - 89%

B+ = 80 - 84%

B = 75 - 79%

B- = 70 - 74%

C+ = 65 - 69%

C = 60 - 64%

D = 50 - 59%

F = 0.0 - 49%

7. Recommended Materials or Services to Assist Students to Succeed

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, Registrar's Office or the College web site at <http://www.camosun.bc.ca>

ACADEMIC CONDUCT POLICY

There is an Academic 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, Registration, and on the College web site in the Policy Section.

www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html