

SAMPLE COURSE OUTLINE**Course Code, Number, and Title:**

CHEM 1114: An Introduction to Chemistry

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 3 h + Seminar 0 h + Lab 2 h

Credits: 4

Transfer credit: For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

A one-semester introduction to chemistry intended for students who have had no secondary school chemistry and who wish to proceed to more advanced chemistry courses. Open only to students who have completed secondary school or equivalent or have been admitted under Dean's Admission.

Prerequisites and Corequisites unavailable, please consult Department for details

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Be sufficiently familiar with laboratory procedures & the names and uses of laboratory equipment to allow the safe and efficient performance of a variety of simple chemical experiments.
- Utilize laboratory procedures to analyze substances both qualitatively and quantitatively
- Describe the position chemistry plays in the sciences, including its history and advancement through the scientific method
- Use chemical principles to explain phenomena encountered in everyday living.
- Explain and utilize the terminology and basic concepts of chemistry to acquire and communicate scientific information and to solve basic chemical problems
- Explain the structure and components of the periodic table and how it came to be
- Write the names and chemical formulas for binary compounds as well as ionic compounds containing polyatomic ions and acids
- Define and predict ionic and covalent bonding using electronegativities and position on the Periodic Table
- Draw acceptable Lewis structures from chemical formulae
- Balance and classify chemical equations
- Identify and predict the products for the types of chemical reactions
- Use the Mole concept:
 - To perform calculations relating the number of particles, moles and mass.
 - To determine percent composition by mass from the formula of a compound.

snəwəyət̚ leləm̚ Langara College acknowledges that we are located on the unceded territory of the Musqueam people.

- To determine the empirical formula from percent composition data.
- To determine the molecular formula from the molar mass and empirical formula
- Describe molarity (M or mol L⁻¹) and perform calculations to determine concentration when a solution is diluted
- Describe the unique bonding capabilities of carbon, and how the element is important in biological and industrial contexts
- Interrelate names and structures of simple organic molecules

Instructor(s): TBA

Office: TBA **Phone:** 604 323 XXXX **Email:** TBA

Office Hours: TBA

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

Summer 2019:

For textbook information, visit https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8

Note: This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.

Assessments and Weighting:

Final Exam %

Other Assessments %

(An example of other assessments might be:) %

Information currently unavailable, please consult Department for details

Grading System:

Specific grading schemes will be detailed in each course section outline.

Information currently unavailable, please consult Department for details

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

Information currently unavailable, please consult Department for details

This generic outline is for planning purposes only.

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

Departmental/Course Policies:

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