

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

CHEM 1217: Environmental Chemistry II

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:

This is a chemistry course for arts majors that focuses on biological and organic chemistry with an emphasis on environmental issues. Topics covered include toxicology, drug chemistry, food chemistry, hydrocarbons, and plastics. This course meets the laboratory science requirement for the Associate of Arts Degree.

Prerequisites and Corequisites unavailable, please consult Department for details

Learning Outcomes:

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

- Recognize elements in their elemental form and in compounds
- Assess the socio-economical implication of extracting & redistributing these elements
- Identify the different forms of bonding between elements and molecular shapes. Analyze the effect bonding and shape has on the properties of different compounds
- Account for the different types of acids and bases. Understand how these acids and bases influence the human body, such as blood and metabolism
- Identify different functionalities and correlate their presence with macroscopic properties, such as hydrophobicity, acidity, volatility and reactivity.
- Recognize a polymer and analyze whether it could be recyclable or not
- Discuss the connection between petroleum and plastic
- Recognize monomeric building blocks that form bioorganic polymers produced and required by the human body. For example, sugar units to
- carbohydrates, fatty acids to fats and amino acids to proteins
- Identify vitamins and minerals that humans require for proper growth. Analyze the content of foods to predict whether vitamin supplements
- should be consumed
- Critique the usage of pesticides, food additives and preservatives used in our food chain

snəwəyət leləm Langara College acknowledges that we are located on the unceded territory of the Musqueam people.

- Assess classes of compounds in our food and care products' from a toxicity perspective and as endocrine disruptor
- Explain the chemical history of the development of analgesics. Contrast the benefits of different painkillers in context of their analgesic, antipyretic and anti-inflammatory properties
- Discuss the four main neurotransmitters and identify their role as either an excitatory or inhibitory neurotransmitter in the synaptic region
- Connect the disruption of the central nervous system normal functioning with the consumption of different drugs. The student should be able to
- discriminate between central nervous system stimulants and inhibitors and explain how the concentration of neurotransmitters has been altered
- Explain the discovery and evolution of antibiotics. Assess the implication of using antibiotics

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

This generic outline is for planning purposes only.

Topics Covered:

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

Information currently unavailable, please consult Department for details

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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