



ccnm
CANADIAN COLLEGE OF
NATUROPATHIC MEDICINE

COURSE OUTLINE 2021

Course:	General Chemistry
Course Code:	SGC100
Times & Location:	Online ZOOM Tutorial: Wednesdays 7:30 – 9:00 pm EST
Course Coordinator:	Dr. Melanie Facca, BSc, MS, ND
Instructor:	Dr. Melanie Facca, BSc, MS, ND
E-mail:	Moodle messaging on course home page
Office Location:	Online

Evaluation:

	PERCENT	TEST DATE / DUE DATE
Module Quizzes	10%	10 Self-Scheduled Quizzes
Module Participation	5%	Tutorial Sessions, Wednesdays 7:30PM-9PM EST
Assignments	5%	2 Assignments - Assignment #1 deadline: last week of course - Assignment #2 deadline: last week of course
Midterm Exam	30%	4th week of course
Final Exam	50%	8th week of course

Plagiarism and cheating are academic offenses and will be treated seriously by the College. Students should refer to the College's policies on academic misconduct posted on in the Academic Calendar. Students may seek guidance from a number of style manuals located in the CCNM library.

Required Text:

McMurray, Ballantine, Hoeger & Peterson. *Fundamentals of General, Organic and Biological Chemistry*: 2017, 8th Edition.). Published by Pearson.

Course Description:

General Chemistry (SGC100) is a three-credit, 8-week introductory course designed to introduce students to the fundamental concepts of chemistry. The course will emphasize the physical and chemical principles of chemistry relating to matter and its transformations including measurement, atoms and molecules, nuclear chemistry, ions, the mole, reaction stoichiometry, gases, solutions, and acids and bases.

The application of chemical fundamentals to naturopathic medicine is integrated throughout the course, providing students with a unique opportunity to learn chemistry within the context of naturopathic medicine. Incorporation of a virtual laboratory component enhances and re-enforces material covered in the course and allows the student to experience a practical application of chemistry while maintaining the convenience of an online chemistry course.

Prerequisites

There are no prerequisite requirements for General Chemistry.

Course Outcomes:

On completion of the course the student will be expected to:

- Demonstrate a basic understanding of chemistry.
- Perform the calculations required of introductory chemistry
- Demonstrate knowledge of the fundamental laws and vocabulary as they pertain to chemistry.
- Effectively read and communicate scientific information
- Apply knowledge of chemistry to a clinical setting
- Demonstrate knowledge of the principles and process of the chemical experiment.

Pedagogy:

The course is delivered in a blended learning style which combines online self-study modules with weekly live interactive online tutorial sessions from 7:30 - 9 p.m. EST (one evening per week) with the course instructor.

Evaluation:

A passing grade is 60%, and evaluations/assessments will consist of: one quiz per module (10 total, 10%), two assignments (5%), webinar participation (5%), one midterm test (30%), and a final exam (50%).

SGC100 General Chemistry

Course Schedule

Class	Date	Modules	Topic
1	Week 1		Introduction to course
2	Week 2	Modules 1 & 2	1) Matter & Measurements 2) Atoms & the Periodic Table
3	Week 3	Modules 3, 4 & 5	3) Ionic Compounds 4) Molecular Compounds 5) Classification and Balancing Reactions
4	Week 4	Midterm Week	No Webinar (Midterm includes Modules 1-4)
5	Week 5	Module 6 & 7	6) Chemical Reactions: Mole & Mass Relationships 7) Chemical Reactions: Energy, Rates and Equilibrium
6	Week 6	Modules 8 & 9	8) Gases, Liquids and Solids 9) Solutions
7	Week 7	Modules 9 & 10	10) Acids & Bases 11) Nuclear Chemistry
8	Week 8	Final Exam Week	Final Exam is cumulative

The Academic Department reserves the right to make schedule changes.

SGC100 General Chemistry Session Learning Outcomes

Tutorial 1 **Week 1**

Introduction to SGC100 General Chemistry

By the end of this session, the student will be able to:

- Navigate Moodle SGC100 course shell and ZOOM programs
- Understand course requirement, including textbook readings, evaluations and deadlines
- Begin the completion of Modules 1 and 2

Deadline: Post a brief introduction on "Please introduce yourself" forum before the start of the tutorial.

Tutorial 2 **Week 2**

Module 1: Matter & Measurements

Module 2: Atoms and the Periodic Table

Deadline: Complete Modules 1 and 2 before the start of the tutorial.

Tutorial 3 **Week 3**

Module 3: Ionic Compounds

Module 4: Molecular Compounds

Module 5: Classification & Balancing of Chemical Reactions

Deadline: Complete Modules 3, 4 and 5 before the start of the tutorial.

Tutorial 4 **Week 5**

Module 6: Chemical Reactions: Mole and Mass Relationships

Module 7: Chemical Reactions: Energy, Rates & Equilibrium

Deadline: Complete Modules 6 and 7 before the start of the tutorial.

Tutorial 5
Week 6

Module 8: Gases, Liquids & Solids
Module 9: Solutions

Deadline: Complete Modules 8 and 9 before the start of the tutorial.

Tutorial 6
Week 7

Module 10: Acids & Bases
Module 11: Nuclear Chemistry

Deadline: Complete Modules 10 and 11 before the start of the tutorial.

Week 8: Final Exam (the final exam is cumulative)