CCNM
CANADIAN COLLEGE OF NATUROPATHIC MEDICINE

COURSE OUTLINE Summer 2025

Course:	General Chemistry
Course Code:	SGC100
Times & Location:	Online ZOOM Tutorial: Wednesdays 8 – 9 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
Assignments	10%	2 Assignments - Assignment #1 deadline: August 6, 2025 - Assignment #2 deadline: August 6, 2025
Participation	10%	N/A
Midterm Exam	30%	**Wednesday June 18th, 2025**
Final Exam	40%	**Wednesday August 6th, 2025**

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, 14-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 reinforces 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 expect 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 8 - 9 p.m. EST (one evening per week) with the course instructor.

Evaluation:

A passing grade is 60%. Evaluations/assessments will consist of: one quiz per module (10 total, 10%), course participation (10%), two assignments (10%), one midterm test (30%), and a final exam (40%). Passing the final exam is not a requirement of passing the course.

SGC100 General Chemistry

Course Schedule

Class/ Week #	Date	Modules	Topic
1	Wednesday, May 7, 2025	Module 1	Introduction to course 1) Matter & Measurements
2	Wednesday, May 14, 2025	Module 2	2) Atoms & the Periodic Table
3	Wednesday, May 21, 2025	Module 3	3) Ionic Compounds
4	Wednesday, May 28, 2025	Module 4	4) Molecular Compounds
5	Wednesday, June 4, 2025	Module 5	5) Classification and Balancing Reactions
6	Wednesday, June 11, 2025	Study Week	Review
7	Wednesday, June 18, 2025	*Midterm Week*	*No Webinar* (Midterm covers Modules 1-5) 6) Chemical Reactions: Mole & Mass Relationships
8	Wednesday, June 25, 2025	Module 7	7) Chemical Reactions: Energy, Rates and Equilibrium
9	Wednesday, July 2, 2025	Module 8	8) Gases, Liquids and Solids
10	Wednesday, July 9 2025	Module 9	9) Solutions
11	Wednesday, July 16, 2025	Module 10	10) Acids & Bases
12	Wednesday, July 23, 2025	Module 11	11) Nuclear Chemistry
13	Wednesday, July 30, 2025	Study Week	Review
14	Wednesday, August 6, 2025	*Final Exam Week*	*No Webinar* (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 requirements, including textbook readings, evaluations and deadlines
- Begin Module 1

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

Tutorial #2: Week 2

Module 1: Matter & Measurements

Deadline: Complete Module 1 <u>before the start of the tutorial.</u>

Tutorial #3: Week 3

Module 2: Atoms and the Periodic Table

Deadline: Complete Module 2 <u>before the start of the tutorial.</u>

Tutorial #4: Week 4

Module 3: Ionic Compounds

Deadline: Complete Module 3 <u>before the start of the tutorial.</u>

Tutorial #5: Week 5

Module 4: Molecular Compounds

Deadline: Complete Module 4 <u>before the start of the tutorial.</u>

Tutorial #6: Week 6

Module 5: Classification & Balancing of Chemical Reactions

Deadline: Complete Module 5 <u>before the start of the tutorial.</u>

<u>Week 7 *There is no tutorial the week of the midterm. The midterm covers modules 1-5 inclusive.</u>

Tutorial #7: Week 8

Module 6: Chemical Reactions: Mole and Mass Relationships

Deadline: Complete Module 6 <u>before the start of the tutorial.</u>

Tutorial #8: Week 9

Module 7: Chemical Reactions: Energy, Rates & Equilibrium

Deadline: Complete Module 7 <u>before the start of the tutorial.</u>

Tutorial #9: Week 10

Module 8: Gases, Liquids & Solids

Deadline: Complete Module 8 <u>before the start of the tutorial.</u>

Tutorial #10: Week 11

Module 9: Solutions

Deadline: Complete Module 9 <u>before the start of the tutorial.</u>

Tutorial #11: Week 12

Module 10: Acids & Bases

Deadline: Complete Module 10 <u>before the start of the tutorial.</u>

Tutorial #12: Week 13

Module 11: Nuclear Chemistry

Deadline: Complete Module 11 <u>before the start of the tutorial.</u>

<u>Week 14* There is no tutorial the week of the Final Exam. The final exam is cumulative.</u>