

CHEM 1001 for Summer 2025

General Chemistry 1

We, the people of the Faculty of Science at Carleton University, acknowledge that our campus is located on the traditional, unceded territories of the Algonquin Anishinabeg people. Miigwetch for your hospitality and stewardship of this territory and the teachings that come from it. We are grateful for this land, the air that we breathe, and the water that sustains us all as well as for the animals, plants and other living beings: these enable us to research, teach, mentor, support, study, and learn. We recognize our responsibility to our natural environment and to reconciliation with Indigenous peoples.

Course Instructor: Peter Gordon

How to address me: Peter, Mr./Dr. Gordon

Gender Pronouns: (he/him)

Email: Peter.Gordon@Carleton.ca

Note: If you have a question or would like to talk with me, but are not comfortable speaking up in class, you can send an email or approach me after lecture. I am happy to chat.

Student Hours: M/W, 14:30-15:00, SC414

Office Location: Room 414, Steacie Building

Class & Tutorial Location: Please check Carleton Central

Class Times: M/W, 11:25 – 14:25

Tutorial: F, 10:05 – 11:55

Lab Location: Steacie (SC) 204A

Lab Times: T/R, 12:35 – 15:25

Prerequisites: Ontario 4U/M in Chemistry (or equivalent) strongly recommended.

Precludes additional credit for CHEM 1005 (no longer offered), CHEM 1011, CHEM 1101.

Department/Unit:

Lab Coordinators: Graham Galway, Mastaneh Azad
(graham.galway@carleton.ca,
mastaneh.azad@carleton.ca)

Course TA's:

Marshall Atherton

(MarshallAtherton@cmail.carleton.ca)

Lab TA's:

Eden Goodwin - Group A

edengoodwin@cmail.carleton.ca

Genevieve Hache – Group B

genevievehache@cmail.carleton.ca

Sydney Pedari – Group C

SydneyPedari@cmail.carleton.ca

Topics Covered and Learning Outcomes

I strive to create a classroom that is welcoming to diverse backgrounds and learning styles. Using varied teaching strategies and broadly relevant examples, my goal is to make chemistry accessible and connected to real-world contexts. I encourage you to communicate with me directly, and value feedback on how to improve. My goal is to empower every student to see themselves as valuable contributors to humanity's scientific efforts. That said, I cannot make you learn anything. The most direct path to understanding is doing the work.

Course Description

Topics include atomic structure, periodic trends, structure and bonding, gas laws, intermolecular forces, equilibrium, acids and bases, and buffers. Examples relate to health, energy, materials, and the environment.

Includes: Experiential Learning Activity

Precludes additional credit for CHEM 1005 (no longer offered), CHEM 1011, CHEM 1101.

Prerequisite(s): Ontario 4U/M in Chemistry (or equivalent) strongly recommended.

Lectures and tutorial eight hours a week, laboratory three hours every week.

Topics to be Covered (timing may vary slightly)

Week	Topic/Content
1	The Behaviours of Gases, Energy and its Conservation
2	Atoms and Light, Atomic Energies and Periodicity
3	May 19 th - Victoria Day (no class), May 21st - Midterm
4	Fundamentals of Chemical Bonding, Theories of Chemical Bonding
5	Effects of Intermolecular Forces, Properties of Solutions
6	Properties of Solutions, Organic Chemistry -- Structure
7	Organic Chemistry – Structure, cont'd
8	Final Exam, exact date to be determined

Important dates and deadlines can be found here:

<https://carleton.ca/registrar/registration/dates/academic-dates/>

Assessments

Grade Breakdown

COMPONENT	GRADE VALUE
MIDTERM	20%
LAB	30%
ONLINE HOMEWORK VIA WILEYPLUS	20%
FINAL EXAM	30%

The lab component must be completed to pass the course.

Grades for each component of the course will be released only via cuLearn.

Late and Missed Work Policies

Late Work

Late classwork will not be accepted. Condensed courses are too short to allow exceptions; there is simply no time to “make up for it” later.

Missed Work

Short-term (5 days or less): see [academic considerations form](#).

Long-term (> 5 days): policy for [longer-term accommodation](#) .

Learning Material(s) and Other Course/Lab-Related Resources

The text for the course is "Chemistry" 4th Canadian Edition by Olmsted, Williams and Burk published by Wiley. The book is available from Carleton's bookstore, bundled with an access code to WileyPlus, a **homework management system you *will* be using**. This is the recommended package to buy.

Here are the ISBNs you can use for ordering.

Olmsted, Chemistry 4th Ed WileyPLUS (digital only with full eText)

ISBN: 9781119724469

\$98.95

Olmsted, Chemistry 4th Ed WileyPLUS with Loose-leaf print

ISBN: 9781119725077

\$163.95

If you buy a used book (not available at the CU Bookstore), or a discounted book elsewhere which does not include an access code, you can then buy access to WileyPlus alone at www.WileyPlus.com. Doing this gives you access to an electronic version of the book instead.

Academic Accommodations and Regulations

Carleton is committed to providing academic accessibility for all individuals. You may need special arrangements to meet your academic obligations during the term. The accommodation request processes are outlined on the Academic Accommodations website (<https://students.carleton.ca/course-outline/>).

Statement on Chat GPT/Generative AI usage

As our understanding of the uses of AI and its relationship to student work and academic integrity continue to evolve, students are required to discuss their use of AI in any

circumstance not described here with the course instructor to ensure it supports the learning goals for the course.

Statement on Academic Integrity

Students are expected to uphold the values of academic integrity, which include fairness, honesty, trust, and responsibility. Examples of actions that compromise these values include but are not limited to plagiarism, accessing unauthorized sites for assignments or tests, unauthorized collaboration on assignments or exams, and using artificial intelligence tools such as ChatGPT when your assessment instructions say it is not permitted.

Misconduct in scholarly activity will not be tolerated and will result in consequences as outlined in [Carleton University's Academic Integrity Policy](#). A list of standard sanctions in the Faculty of Science can be found [here](#).

Additional details about this process can be found on [the Faculty of Science Academic Integrity website](#).

Students are expected to familiarize themselves with and abide by [Carleton University's Academic Integrity Policy](#).

Student Rights & Responsibilities

Students are expected to act responsibly and engage respectfully with other students and members of the Carleton and the broader community. See the [7 Rights and Responsibilities Policy](#) for details regarding the expectations of non-academic behaviour of students. Those who participate with another student in the commission of an infraction of this Policy will also be held liable for their actions.

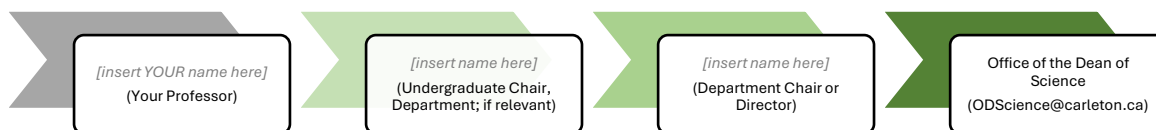
Mental Health and Wellness:

As a student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you. For more information, please consult <https://wellness.carleton.ca/>.

Student Concerns

If a concern arises regarding this course, **your first point of contact is me**: Email or drop in during student hours and I will do my best to address your concern. If I am unable to address your concern, the next points of contact are (in this order):

Note: You can also bring your concerns to [Ombuds services](#).



Assistance for Students

Writing and Learning Support: <https://carleton.ca/csas/support/>

Peer Assisted Study Sessions (PASS): <https://carleton.ca/csas/pass/>

Math Tutorial Centre: <https://carleton.ca/math/math-tutorial-centre/>

Science Student Success Centre: <https://sssc.carleton.ca/>