

CHEM 1002 E – General Chemistry II Winter 2023

Instructor: Sydney Buttera

Lectures

Lectures are in-person on **Mondays and Wednesdays 11:35 am - 12:55 pm** in **Health Science Building room 1301**.

Tutorials

Tutorials will be on Fridays **11:35 am - 12:25 pm** in **Azrieli Theatre 301**.

I highly encourage you to attend and ask any questions you might have while we solve problems together! Please bring paper and a pencil/pen to follow along with the calculations.

Textbook

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 a **two-term access code to WileyPlus**, a homework management system you will be using. This is the recommended package to buy. If you buy a used book, 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. See more information about this on Brightspace.

Grading

Midterm test – 20%

Laboratory – 30%

Online assignments via Wiley Plus – 20%

Final exam – 30%

The lab component must be completed to pass the course. Please see the Laboratory section on Brightspace for any information you need about the lab, or contact your lab coordinators (Mastaneh Azad: 207A SC, mastaneh.azad@carleton.ca; or Natalie Mesnic: 207C SC, nataliemesnic@cunet.carleton.ca).

Grades for each component of the course will be released on Brightspace.

Assignments

Assignments will be given for each chapter via **WileyPLUS** (all links with due dates on Brightspace). It is your responsibility to complete these assignments on time, but even more importantly, to check the answers and act if you haven't understood the material. **Do not neglect these assignments!** We have 25 years of data to show that students who neglect the assignments don't do as well on midterms and exams, where the stakes are much higher. Also, those who do well on assignments tend to score well in the course overall.

Midterm

The midterm will take place **in class** on **Wednesday February 15th** from **11:35 am – 12:55 pm**.

Communicating with me

It's important that you let me know if you have any questions or need help! Here's how:

1. Ask questions in class or during tutorial.
2. Email me (sydneybuttera@cunet.carleton.ca).
3. If you want to chat privately about a topic you need help with (or for another reason), send me an email and we'll schedule a Zoom meeting so we can talk "face-to-face". This is also best for if you need to discuss assignment questions, because then I can have it open on my computer as well.

Academic Accommodation or Special Arrangements

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy obligation: Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation: Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic accommodations for students with disabilities: If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc

Academic Integrity

Carleton University maintains and enforces a comprehensive policy on academic integrity. Please click [here](#) and read the policy in detail. It is your responsibility to understand the integrity standards and to abide by them.

Research Activities

Please note that grade data from CHEM 1002 E will be collected, used, and disclosed by Sydney Buttera, PhD, Post-Doctoral Researcher in the Department of Chemistry. The purpose of the research is to compare grade data from CHEM Matters (CHEM 0999) to CHEM 1001/1002 to determine the effectiveness of CHEM Matters and identify opportunities for course delivery improvement. In order to complete this study, Sydney Buttera will be receiving and extracting of grade data from the Brightspace Learning Management System. No personal identifiers will be used when reporting on the study. If you do not wish for your grades to be used by Dr. Buttera, please communicate with her by email (sydneybuttera@cunet.carleton.ca) by January 16th, 2023.

Syllabus

The content of CHEM 1002 mirrors the second half of the textbook used in the course. Approximate order of topics below, subject to change as time permits.

Chapter 11. Organic Chemistry – Reactions

Chapter 12. Spontaneity of Chemical Processes

Chapter 13. Kinetics – Mechanisms and Rates of Reactions

Chapter 14. Principles of Chemical Equilibrium

Chapter 15. Aqueous Acid-Base Equilibria

Chapter 16. Applications of Aqueous Equilibria

Chapter 17. Electron Transfer Reactions

Chapter 19. The Transition Metals

Chapter 20. The Main Group Elements

Chapter 21. Nuclear Chemistry and Radiochemistry