Chem10200: General Chemistry 1 Fall 2026

Friday 9:00 - 10:50 am, Assembly Hall (118N)

Instructor: Dr. Nadezhda Kobko-Litskevitch

Email: hc.nkobko@gmail.com

Office Hours: will be posted during the first week of classes.

Except for changes that substantially affect implementation of the grading policy, this syllabus is intended as a guide for the course and is subject to change with advance notice. If any changes are made, they will be announced in class, and an updated version will be posted on Brightspace and Achieve.

Course Information, Expectations, and Policies

1. Course Goals

General Chemistry I is the first semester of a two-semester General Chemistry sequence designed to begin preparing you for a science-based career.

This is a demanding course. Its primary goal is to introduce you to the fundamental principles of chemistry, but success requires more than memorizing facts and formulas. You will need to:

- organize a large amount of information in coherent ways;
- understand how different chemical ideas are connected;
- recall important concepts and relationships; and
- apply your knowledge to unfamiliar problems.

Good time management and consistent weekly work are essential for success in this course.

2. How the Course Works: The Flipped-Classroom Model

General Chemistry I is taught **in person using a flipped-classroom model**.

Instead of spending most class time listening to traditional lectures, you will begin engaging with the basic material before class by:

- watching the assigned Topic videos;
- taking detailed notes;
- completing Learning Goal Analysis (LGA) surveys; and
- working on the assigned online homework.

You will then come to class to build on this preparation through instructor-guided explanations, peer learning, and problem-solving activities:

- **Recitation workshops:** 1-hour recitation meetings
- **iClicker classes:** Friday lecture meetings

Recommended Weekly Schedule

Before Tuesday morning each week, we strongly recommend that you:

1. Watch the assigned Topic videos.
2. Complete the LGA surveys.
3. Begin the Skill Practice portion of the weekly homework.

You should plan to spend **at least 10–15 hours per week studying chemistry**, including watching videos, taking notes, completing homework, participating in class activities, and reviewing the material.

It is your responsibility to prepare for each topic before coming to class for iClicker or workshop activities.

3. Taking Notes and Preparing for Class

Video Notes

You must take **detailed notes while watching the course videos**, just as you would during a traditional lecture.

Simply watching the videos is not enough. Your video notes provide the foundation for your learning and will become an important resource when you prepare for exams.

Notes During iClicker Classes

Bring your notebook to every Friday iClicker class and take **additional detailed notes** on the problems, explanations, and concepts discussed in class.

During iClicker questions, however, we recommend that you **first try to answer without looking at your video notes**. Practice retrieving information from memory and applying what you know. These are the same skills you will need on the course exams.

Your notes from both the videos and the iClicker sessions will form an important part of your exam preparation.

Keep up with the material every week. Chemistry concepts build on one another, and it can be very difficult to catch up once you fall substantially behind.

The teaching team is here to support your learning, but your success depends on consistent preparation and participation throughout the semester.

Course Materials and Platform

4. Textbook and Workbook

Textbook

You are not required to purchase a textbook.

An electronic textbook is included with your Achieve subscription, and you may also use **any college-level General Chemistry textbook** as an additional reference or for extra practice problems.

We will not work through a textbook chapter by chapter. Instead, the course is organized around **18 chemistry topics**, and a textbook should be used primarily as an additional reference when needed.

Any used college-level General Chemistry textbook is perfectly acceptable. If you would like a specific recommendation, *Chemistry, 8th Edition* by Zumdahl & Zumdahl is a good option.

Optional Workbook

You may also purchase the **General Chemistry I: Let's Practice Workbook** from the Hunter College online bookstore. The workbook contains all of the "Let's Practice" problems presented in the Topic videos.

5. Your Empl ID and Course Email

Your **Empl ID is essential for correctly recording your grades**.

When registering:

- **Achieve:** enter your Empl ID as your **Username**
- **iClicker Student App:** enter your Empl ID as your **Student ID**

Dr. Kobko will use your Empl ID to transfer grades from Achieve and iClicker into Brightspace gradebook.

Course Communication

We will communicate important course information through **Brightspace (BS)**.

Please regularly check the email account associated with your Brightspace account so that you do not miss messages from Dr. Kobko or your recitation instructor.

6. Achieve

Achieve is the primary online platform for this course. It has been customized specifically for General Chemistry I.

You will use Achieve for:

- Topic videos and Video PDF documents;
- Learning Goal Analysis surveys;
- online homework assignments;
- iClicker PDF documents;
- old General Chemistry exams;
- course documents: the Pacing Guide, the Grading Scheme, the Contact Information, etc.
- your homework grades.

The syllabus will be available in the **Course_Documents** folder, and your homework grades will appear in the Achieve **Gradebook**.

Achieve Registration

Achieve will be available for registration after 10:00 a.m. on August 26.

Please register as soon as possible so that you have time to become familiar with the platform.

You should already be registered in Achieve before our first Friday meeting on August 28.

How to Register

1. Go to: Achieve course registration page (https://achieve.macmillanlearning.com/courses/5aygxk/ where **5aygxk** is the Course ID)
2. If you have previously used Achieve, log in using your existing account. Otherwise, create a new account.
3. If you create a new account, check your email and complete the account-confirmation process.
4. After logging in, choose either: paid Achieve access, or the 14-day free trial.
5. Complete the registration process and enter the course.

Achieve Access Options

You may purchase either:

- **1-term access** (see above), or
- **8-term access**, which allows you to use Achieve for any courses for up to eight semesters (https://store.macmillanlearning.com/us/product/Achieve-Essentials-for-OpenStax-General-Chemistry-1-Term-Access/p/9781319471293, use **5aygxk** as the Course ID).

Both options include the OpenStax e-book.

If you expect to take both **CHEM 102 and CHEM 104 with Dr. Kobko**, we recommend purchasing the 8-term option because Achieve is also used in CHEM 104.

You may begin with the **14-day free trial**, but after the trial expires you must purchase access to continue using the platform.

Achieve Help

For detailed student instructions, see the Macmillan **Getting Started Guide for Students**.

For technical problems with Achieve, contact **Macmillan Customer Support** through its email, chat, or phone support options.

7. iClicker Student App

We will use the **iClicker Student App** during Friday lecture meetings.

iClicker serves two important purposes:

1. Your responses provide the teaching team with real-time information about student understanding.
2. The questions give you repeated practice applying chemistry concepts and solving problems.

Your iClicker access is included with your Achieve subscription.

If you already have an iClicker account, add:

General_Chemistry_I (Chem102)_with_Dr.Kobko

When setting up your iClicker account:

- use your **official name**; and
- enter your **Empl ID as your Student ID**.

Course Content

8. Course Topics

During the semester we will cover the following 18 topics:

1. Matter, Models, and Math
2. Atoms and Orbitals
3. Basic Bonding Principles
4. Introduction to Covalent Bonding

5. The Chemical Equation
6. Energy Considerations
7. Periodic Trends
8. Atomic Spectroscopy
9. The Electron
10. Molecular Geometry
11. Valence Bond Theory
12. Molecular Orbital Theory
13. The Mole
14. Stoichiometry Calculations
15. Empirical and Molecular Formula
16. Intramolecular Forces
17. Gases
18. Applications of Stoichiometry: Aqueous Solutions

Pacing Guide

To help you organize your weekly work, you will find the following documents in Achieve under **Course_Documents**:

- **Pacing Guide** - contains assignment deadlines and exam dates.
- **Video Table of Contents** - shows the length of each topic video.

Grading and Assessment

9. Course Grade at a Glance

Your course grade is based on a maximum of **1,400 points**:

- **Topic Points:** 400 points
- **Exam Points:** 1,000 points

Although you can earn up to **450 Topic points** during the semester by completing all homework correctly and on time and earning all workshop and iClicker points, only the first **400 Topic points** will count toward your final course grade.

The additional 50 points ("excess points") provide flexibility if you miss an assignment, workshop, or some iClicker points.

You cannot earn more than 400 Topic points, and unused excess Topic points cannot be transferred to your exam grade.

Your total points will be converted to a score out of **100.00** and assigned a letter grade according to Hunter College grading guidelines (https://www.hunter.cuny.edu/students/registration/records-and-transcripts/grading-structure/).

Final numerical grades are calculated to **two decimal places and are not rounded** when letter grades are assigned.

10. Topic Grade

Your Topic Grade includes several types of assignments and course activities. The purpose of each one is to help you **learn and master the course material**. If you complete the assignment by the deadline, you will also earn the points assigned to it. To earn workshop or clicker points you must attend your scheduled recitation and iClicker classes.

In other words, you complete assignments and participate in course activities in order to master chemistry; the points are awarded for completing that work on time and participating as required.

If you miss a deadline or in-class activity for any reason, please do not email me asking for the assignments to be reopened or for missed points be restored. Instead, those missed points will be covered by some of the 50 "excess" Topic points built into the course grading system (see above).

LGA quiz and Video Certification Assignments

LGA and Video certification assignments are graded on an **all-or-nothing basis**:

- completed by the deadline = **1 point each**
- completed after the deadline = **0 points**

Homework

Each Topic Homework assignment includes:

- **Skill Practice:** up to 1 point for each video set within the Topic
- **Synthesis Set:** up to 4 points per Topic

Each Topic also includes an optional **Homework Extra-Credit assignment**, worth up to **1 point** if completed by the deadline.

Workshops and iClicker

Workshop and iClicker points are also included in your Topic Grade.

*Across all Topic activities, **450 points are available**, but a maximum of **400 Topic points** can count toward your final course grade.*

11. Learning Goal Analysis (LGA)

Before beginning each new Topic, you are required to complete a **Learning Goal Analysis (LGA)** on Achieve.

The LGA asks you to review the learning goals for the Topic and assess your current comfort level with each one.

There are **no wrong answers** on an LGA. Its purpose is to help you:

- identify what you already understand;
- recognize what you need to learn;
- focus your studying; and
- monitor your progress.

The learning goals provide an outline of the material you are expected to master.

Every exam question is based on at least one learning goal, although many questions address several learning goals at the same time.

A complete LGA document is available in the **Course_Documents** folder on Achieve. Use this document when reviewing for exams.

12. Required Homework

Homework assignments are completed through Achieve.

To earn credit, homework must be completed before the posted deadline.

Assignments completed after the deadline will not receive credit.

Please do not ask for an individual assignment to be reopened after its deadline has passed.

Each Topic also includes an optional **1-point extra-credit homework set**, which contributes to the 50 "excess" Topic points. These sets contain review problems from earlier Topics. We strongly recommend completing them because they provide useful cumulative practice and give you another opportunity to earn Topic points.

13. Required Recitation Workshops

You will complete a weekly workshop during your scheduled recitation class.

Workshops are completed in groups of **3 or 4 students** and submitted to your recitation instructor during the recitation period.

There are **13 graded workshops** during the semester. Each workshop is worth **5 or 10 points**.

Attendance Requirement

To receive workshop credit, you must attend **the recitation section for which you are registered**.

If you miss a workshop, you do not receive the points for that workshop.

One Recitation Make-Up

If you miss a recitation for any reason, you may make up **one workshop during the semester**. The make-up must be completed **during the same week in which the workshop is due**.

To arrange a make-up:

1. Email your regular recitation instructor to obtain permission to make up the workshop.
2. Email the instructor of the recitation section you plan to attend to obtain permission to attend that section.
3. When you attend the alternate section, **remind the instructor that you are there to make up a workshop**.

Please do not email Dr. Kobko to arrange a recitation make-up.

Remember that 50 "excess" Topic points are built into the grading system and missing a 5- or 10-point workshop therefore uses some of this built-in flexibility.

14. Required iClicker Sessions

There will be **10 required iClicker sessions** during the semester.

Each session is worth a maximum of **11 points**:

- **1 point** for participating in the session; and
- up to **10 additional points** based on your answers.

For individual questions, you may earn **1 point or ½ point** for a correct response.

Most sessions will contain more than 10 questions, but the maximum score for any one session is **11 points**.

iClicker Technical Problems

You are responsible for having a functioning iClicker app during class.

If your iClicker app malfunctions, you may lose points for that session. To troubleshoot, first try turning Wi-Fi off and back on, then restart the iClicker app. If the problem continues, contact iClicker Support. **Please do not request replacement points for individual iClicker technical problems.**

The 50 "excess" Topic points are intended in part to provide flexibility for occasional missed iClicker points.

Exams

15. Exam Structure

There will be:

- **3 in-class exams:** 200 points each
- **Comprehensive Final Exam:** 400 points

The standard exam total is therefore **1,000 points**.

Final Exam Replacement Policy

If your percentage score on the Final Exam is higher than your percentage score on your lowest in-class exam:

- your lowest in-class exam will be dropped; and
- the Final Exam will instead be calculated out of **600 points**.

Your Exam Grade will still have a maximum value of **1,000 points**.

16. Exam Requirements

For every exam, bring:

- a **#2 pencil**; and
- a **scientific calculator**.

All other required materials, including the periodic table and formula sheet, will be provided.

No Make-Up Exams

There are NO make-up exams.

Exams must be taken during the designated exam period.

If you miss **one** in-class exam for any reason:

- the missed exam will be recorded as zero;
- that exam will automatically become your dropped exam; and
- your Final Exam will automatically be calculated out of **600 points instead of 400**.

If you miss **more than one** in-class exam, each additional missed exam will remain a grade of zero.

17. Tentative Exam Schedule

Exam 1 — Friday, October 2

Think of Exam 1 as an important **Chem102 placement checkpoint**. Your performance indicates whether you have developed the knowledge and study habits necessary to continue successfully in the course.

If you fail Exam 1, you should seriously consider whether withdrawing from the course is appropriate.

If you decide to remain enrolled, please meet with the teaching team to discuss strategies for improvement. Continuing successfully will likely require a substantial change in your study habits.

Exam 2 — Friday, October 30

Exam 2 is more difficult than Exam 1.

If you do not pass both Exam 1 and Exam 2, we recommend that you carefully consider whether continuing in the course is the best option for you and discuss your situation with your academic advisor and the teaching team.

Last day to request a P/NC grade: November 4. The last day to withdraw with a grade of W: November 6.

Exam 3 — Friday, December 11

Exam 3 is the final and generally the most difficult in-class exam.

Historically, student grades tend to decrease from Exam 2 to Exam 3, so make sure you allow sufficient time to prepare.

Final Exam — Friday, December 18

The Final Exam is **comprehensive** and will be an exam prepared by the **American Chemical Society (ACS)**.

THE MOST IMPORTANT THINGS TO REMEMBER

To succeed in General Chemistry I:

- **Keep up with the course every week.**
- Complete your LGA and begin your homework early in the week.
- Watch the Topic videos and complete the Skill practice HW set **before** coming to class.
- Take **detailed notes** while watching the videos.
- Attend and participate in your recitation workshops.
- Attend Friday iClicker classes and take additional notes.
- During iClicker questions, first try to **remember and apply** what you know rather than immediately looking up the answer.
- Complete assignments **before their deadlines** to get points.
- Use your learning goals to guide your exam preparation.
- Ask the teaching team for help **before** you fall substantially behind.

We are here to support you, but learning chemistry requires consistent effort throughout the semester.

Academic Dishonesty

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures, see:

CUNY Policy on Academic Integrity

Students who are caught cheating on an exam in this course will automatically obtain a grade of ZERO for that exam and will be reported for Academic Dishonesty. This grade of ZERO cannot be used as your lowest exam score to be dropped in the course.

Students who are caught cheating during a workshop or a clicker session will automatically obtain a grade of ZERO for that workshop or clicker set and will be reported for Academic Dishonesty.

ADA Statement

In compliance with the ADA and with Section 504 of the Rehabilitation Act, Hunter College is committed to ensuring educational access and accommodations for all its registered students. Hunter College's students with disabilities and medical conditions are encouraged to register with the Office of AccessABILITY for assistance and accommodation. For information and appointment contact the Office of AccessABILITY (located in room E1214) or call 212–772–4857 or VRS 646–755–3129.

Hunter College Policy on Sexual Misconduct

In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationships. Students who have experienced any form of sexual violence on or off campus (including CUNYsponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.

1. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646–610–7272) or their local police precinct, or contacting the College's Public Safety Office (212–772–4444).
2. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212–650–3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212–772–4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123. CUNY Policy on Sexual Misconduct Link: CUNY Policy on Sexual Misconduct

Use of Generative AI

Unless you are explicitly given permission to use generative AI tools, **you are expected to complete all written assignments independently, without substantial assistance from automated tools such as ChatGPT or from other individuals**. Work generated by an AI system is not considered your own original work and may not be submitted as such. All submitted assignments must represent your own work completed for this course.

If you use generative AI as part of the **preparatory work** for an assignment—for example, to brainstorm, clarify a concept, or organize ideas—you must disclose where and how you used it in a note included with your submission.

Submitted work may be reviewed using AI-writing detection tools or other methods. Such a review may lead to a discussion about the authenticity of the work and, when appropriate, to a formal review under the College's academic integrity procedures.

Please note: Information produced by generative AI may be inaccurate, incomplete, misleading, or otherwise unreliable.

Tentative Academic Calendar for Fall 2026

8/28/26	Friday	**Start of Fall 2026 semester**
9/3/26	Thursday	Last day to add or swap a course
9/4/26	Friday	***WD grade*** assigned to students who drop a course
9/7/26	Monday	**College closed**
9/11/26 - 9/13/26	Friday - Sunday	**No classes scheduled**
9/17/26	Thursday	Last day to declare major/minor for Fall 2026 semester
9/18/26	Friday	Withdrawal period begins (drop a course with a ***W grade***)
9/21/26	Monday	**No classes scheduled**
9/27/25	Sunday	***WA grades*** are assigned for MMR non-compliance
10/12/26	Monday	**College closed**
10/13/26	Tuesday	**Classes follow a Monday schedule**
10/19/26	Monday	***P/NC grade*** request period opens
11/4/26	Wednesday	***P/NC grade*** request period ends
11/6/26	Friday	Last day to drop a course with a ***W grade***
11/8/26	Sunday	**No classes scheduled**
11/25/26	Wednesday	**No classes scheduled**
11/26/26 - 11/28/26	Thursday - Saturday	**College closed (Thanksgiving) – no classes scheduled**
12/14/26	Monday	Last day of classes before Finals
12/15/26 – 12/21/26	Tuesday - Monday	Final examinations
12/21/26	Monday	**End of Fall semester**
12/24/26 - 12/25/26	Thursday - Friday	**College closed – no classes scheduled**
12/28/26	Monday	**Final grade submission deadline**