

**Brooklyn College Chemistry 1007
Chemistry in Modern Life
Fall 2023 Syllabus - L.J. Juszczak
Sections W3A-CL**

The Learning Objectives in the Life and Physical Sciences are that the student should be able to:

- 1. Identify and apply the fundamental concepts and methods of a life or physical science.*
- 2. Apply the scientific method to explore natural phenomena, including hypothesis development, observation, experimentation, measurement, data analysis, and data presentation.*
- 3. Use the tools of a scientific discipline to carry out collaborative laboratory investigations.*
- 4. Gather, analyze, and interpret data and present it in an effective written laboratory or fieldwork report.*
- 5. Identify and apply research ethics and unbiased assessment in gathering and reporting scientific data.*

The course meets on Wednesdays 3:40 - 5:20 PM in 1141 Ingersoll Hall.

THE CURRICULUM. This course assumes NO PRIOR CHEMISTRY INSTRUCTION. The lecture will introduce basic concepts of chemistry: structure of atoms, the Periodic Table, the nature of chemical bonds, the energetics of chemical reactions. This minimal background will provide the basis for discussion of topics of practical interest.

An **in-person laboratory** is an integral part of this course, and meets once a week.

Background material for labs will be covered in lecture, but the student is expected to thoroughly review and understand the lab procedure before undertaking the experimental work. **LAB ATTENDANCE IS MANDATORY.**

The handbook of laboratory experiments is posted on the Blackboard website for the course. Students are expected to print out a hardcopy of the report sheet for each experiment.

No purchase of a textbook is required for the lecture. However, the following open-access chemistry textbook may be a useful reference:

<https://openstax.org/details/books/chemistry-2e>

The **FINAL GRADE** for the course is based on the sum of the scores received for the following:

45% lab report grade

5% lab quiz grade

50% 4 quizzes (12.5% each)

Grading Scale

95 or higher: A+	68-70: C+
87-95: A	62-68: C
85-87: A-	58-62: C-
82-85: B+	50-58: D*
72-82: B	Less than 50: F
70-72: B-	*Requests to change a grade of D to F will not be honored.

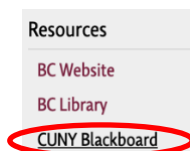
QUIZZES. There are four in-class quizzes: **Sept. 20, Oct. 11, Nov. 1, Dec. 6.** Quizzes may be based on lecture as well as lab material.

Course work cannot be completed independent of the lab work. **NO credit is earned for coursework without completion of the lab assignments.**

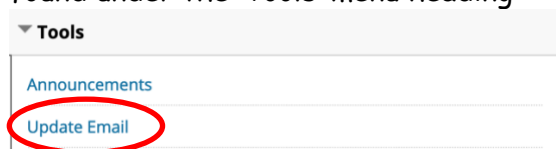
Make sure that the email address you use is the one listed in BlackBoard because I will be sending you class information via this email address.

To change your email address in BlackBoard, follow these steps:

1. Go to cunyportal.cuny.edu (Brooklyn College WebCentral) and log in.
2. Click on the Resources menu item for CUNY BlackBoard:



3. Once you have logged into BlackBoard, the menu item for changing your email can be found under the 'Tools' menu heading:



THE LABORATORY

Lab experiments: PDFs will be available on Blackboard.

You will need: A small combination or key lock to secure lab supplies in the lab desk cabinet.

Laboratory Schedule

NOTE: Labs meet EVERY WEEK at different assigned times in labs on the 2nd floor of Ingersoll extension. Lab instructors may have individual lab syllabi.

Lab meeting 1: Check-in, lab techniques. Intro to Lab Safety and first Experiment, Physical and Chemical Changes of Matter. Lab safety quiz is distributed and is due during the 2nd lab meeting. 5 pts extra credit is assigned to successful completion of safety quiz.

Lab meeting 2 & 3: Physical and Chemical Changes of Matter and Conservation of Mass

Lab meeting 4: A Change in Energy accompanies Physical and Chemical Changes

Lab meeting 5: Colorimetric ID of Ions

Lab meeting 6: Counting out Atoms and Molecules using the Concept of Moles

Lab meeting 7: The Effect of Chemical Bonds on the Physical Properties of Matter

Lab meeting 8 & 9: How Water is Purified

Lab meeting 10: Paper Chromatography of Pigments in a Spinach Leaf

Lab meeting 11: Creating Aromas - Ester Synthesis

Lab meeting 12: Extraction of DNA from Bananas

Lab meeting 13: Using Models to Build Molecules

Lab meeting 14: Lab quiz and Check-out

Details about lab attendance, lab reports and grades. Attendance will be taken at the beginning of each lab class. It is the student's responsibility to notify the instructor of her/his presence.

Students are expected to come to lab **ON TIME** and be prepared by having read and understood the lab procedure **BEFORE** carrying out the work in class.

Each of the 10 lab report sheets and safety quiz must be handed in at the laboratory class meeting one week following the completion of the experiment. **Lab report sheets** are expected to be stapled together, and the

student's and lab instructor's name must appear on each sheet. Points awarded for each lab report are at the discretion of the lab instructor but will total to 45% of lab grade.

Instructors deduct 2 points for each week the lab report is handed in late. **Labs missed due to illness** must be made up by attending alternate lab sessions with permission of the lab instructor, arranged through the General Chemistry stockroom CLTs, Dr. Yasemin Kopkalli or Dr. Olga Berezovska (248 IE). Documentation of illness must be presented to the stockroom technician. Labs so completed must be accompanied by a signed lab form, obtained from the stockroom technician. This form is to be returned to the student's assigned lab instructor. Experiments not completed will result in a grade of zero for that experiment. **LAB ATTENDANCE IS NOT OPTIONAL. STUDENTS WILL RECEIVE A GRADE OF F FOR THE COURSE IF MORE THAN TWO LABS ARE MISSED AND NOT MADE UP. MISSED LABS MUST BE MADE UP WITHIN 2 WEEKS OF THE EXPERIMENT ASSIGNMENT. LAB MAKE-UPS ARE SUBJECT TO LAB SPACE AVAILABILITY. LAB MAKE-UPS CANNOT BE SCHEDULED DURING THE LAST TWO WEEKS OF CLASSES.**

Students are to work individually in the laboratory unless specifically told otherwise. Students are expected to actively participate in the collection of all data. 'Sharing' of results without actual participation in collection of those results constitutes cheating, and can have serious academic consequences (See "Academic Integrity" below.)

It is a **New York State law** that **safety goggles must be worn** at all times by all students in the laboratory. **Goggles are provided as part of the lab equipment rental fee.** Students who consistently refuse to properly wear safety goggles during the lab

period **will be dismissed from the laboratory.** Students so dismissed will not have the opportunity to make up missed lab work. It is the student's responsibility to bring her/his goggles to each lab session. If the student completes their lab work before the end of the session, students **MUST** continue to wear their goggles until they have exited the lab.

Eating and drinking are also not permitted during lab sessions. Students may also be dismissed for violation of this safety rule.

Pregnant students are encouraged to defer taking chemistry 1007 as the lab is an integral part of the course.

Written assignments are to be handed in to your lab instructor for grading the week following their assignment, that is, at the time of the lab meeting following the written assignment.

Accommodations for Students with Disabilities

The Center for Student Disability Services (CSDS) is committed to ensuring students with disabilities enjoy an equal opportunity to participate at Brooklyn College. In order to receive disability-related academic accommodations, students must first be registered with CSDS. Students who have a documented disability or suspect they may have a disability are invited to schedule an interview by calling (718) 951-5538 or emailing Josephine.Patterson@brooklyn.cuny.edu If you have already registered with CSDS, email Josephine.Patterson@brooklyn.cuny.edu or testingcsds@brooklyn.cuny.edu to ensure accommodation emails are sent to your professor.

Academic Integrity. The faculty and administration of Brooklyn College support an environment free from cheating and

plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both. The complete text of the CUNY Academic Integrity Policy and the Brooklyn College procedure for policy implementation can be found at www.brooklyn.edu/policies. If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member **MUST** report the violation. Students should be aware that faculty may use plagiarism detection software. All students should read the section entitled "Academic Regulations and Procedures" in the Brooklyn College *Undergraduate Bulletin* or *Graduate Bulletin* for a complete listing of academic regulations of the College. These may be found on the [Bulletins page](#) of the Registrar's website.

Classroom Etiquette. Every student is entitled to a positive classroom learning environment free of distractions. Out of respect for your fellow students and their learning process, please refrain from distracting behaviors during class lecture. This includes talking during lecture unless called upon to do so by the instructor, using cell phones / tablets / laptops for non-class related activities, and wearing of headphones / ear buds in class. Since these behaviors can negatively impact your fellow learners, the instructor reserves the right to ask you to leave the classroom if it persists.

Reference to the state law regarding **non-attendance because of religious beliefs**, is noted in the front matter of the *Undergraduate Bulletin* and *Graduate Bulletin*. This may be found on the [Bulletins page](#) <https://www.brooklyn.edu/registrar/bulletins/> of the Registrar's website.

Student Bereavement Policy

Students who experience the death of an immediate family member must contact the Division of Student Affairs, 2113 Boylan Hall, 718.951.5352, studentaffairs@brooklyn.cuny.edu, if they wish to implement either the Standard Bereavement Procedure or the Leave of Absence Bereavement Procedure. The Division of Student Affairs has the right to request a document that verifies the death (e.g., a funeral program or death notice). <https://www.brooklyn.edu/policies/bereavement/>

Sexual and Gender-based Harassment, Discrimination, and Title IX

Brooklyn College is committed to fostering a safe, equitable and productive learning environment. Students experiencing any form of prohibited discrimination or harassment on or off campus can find information about the reporting process, their rights, specific details about confidentiality, and reporting obligations of Brooklyn College employees on the [Office of Diversity and Equity Programs](#) website.

All reports of sexual misconduct or discrimination should be made to Michelle Vargas, Title IX Coordinator (718.951.5000, ext. 3689), and may also be made to Public Safety (719.951.5511), the New York City Police Department (911 or a local NYPD precinct), or Melissa Chan, Associate Director of Judicial Affairs, Division of Student Affairs (718.951.5352), as appropriate.

The [CUNY Equal Opportunity and Non-discrimination Policy](#) includes additional information regarding reporting discrimination and/or retaliation.

As an educator, I support the rights of undocumented students to an education. If you have any concerns in that regard, feel free to discuss them with me, and I will respect your wishes concerning confidentiality. For resources and support, please visit Brooklyn College's **Immigrant Student Support Office** located at 17 Roosevelt Hall. You can also contact them via email at ISSO@brooklyn.cuny.edu or via phone at 718-951-5023.

Lecturer Contact Information

Email: LJUZAK@brooklyn.cuny.edu

Virtual office hours: Tu 9:00 - 10:00 am
Th 9:00 - 10:00 am

Zoom links are posted on Blackboard.

Chair's Student Office Hours

Thursdays 3:30 - 4:30 PM (except Oct 12 and Nov 2), chair's office in 359 Ingersoll Ext.

Important Dates

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| - Friday, August 25 | First day of Fall 2023 classes |
| - Thursday, August 31 | Last day to add a course |
| - Monday, September 4 | College Closed – No classes scheduled |
| - Friday, September 15 <i>through</i>
Sunday, September 17 | No classes scheduled |
| - Monday, September 25 | No classes scheduled |
| - Monday, October 9 | College Closed – No classes scheduled |
| - Tuesday, October 10 | Conversion Day – Classes follow a Monday schedule |
| - Wednesday, November 22 | No classes scheduled |
| - Thursday, November 23 <i>and</i>
Friday, November 24 | College Closed – No classes scheduled |
| - Saturday, November 25 <i>and</i>
Sunday, November 26 | College <u>OPEN</u> – No classes scheduled |
| - Monday, December 11 | Last day to withdraw from a course with a “W” grade |
| - Tuesday, December 12 <i>and</i>
Wednesday, December 13 | Reading Days |
| - Thursday, December 14 | Final Exams Begin |
| - Wednesday, December 20 | Final Exams End / End of Fall Semester |