

# Chemistry 1302A • Fall 2025

## Discovering Chemical Energetics

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### Welcome to Chem 1302A!

Please read this important information and refer to this document throughout the term.

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### *Course Description*

**Calendar Description:** *An examination of how the fundamentals of energetics influence chemical processes. Topics include: gases, thermodynamics and thermochemistry, chemical equilibria, solubility, weak acids and bases, electrochemistry, and chemical kinetics.*

**Prerequisite:** Grade 12U Chemistry (SCH4U) or equivalent. Grade 12U Advanced Functions (MHF4U) or Calculus & Vectors (MCV4U), or Mathematics 0110A/B or 0105A/B, is strongly recommended.

**Antirequisites:** The former Chem 1024A/B.

**Extra Information:** 3 lecture hours, 1.5 laboratory hours (3 hours every other week).

**Note:** Students repeating the course must repeat the lab component. **There are no exemptions.**

Unless you have either the prerequisites for this course or written special permission from the Department of Chemistry to enroll in it, you may be removed and withdrawn from this course in accordance with university policy. This may be done after the add/drop deadline of the academic term, and the course will be marked as withdrawn (WDN) on your academic record. This decision may not be appealed.

## Key Dates

Dates in 2025	Event
Friday, September 5	Course begins. Attend your first Chem 1302A class!
Friday, September 12	Last day to add a second-term half course or make changes to lab section enrolment.
Friday, September 19	OWL Intro Activity and OWL Pre-Test due by 11:55 pm. First designated class for team-based problem-solving. Lab location and personalized Achieve lab site link available on OWL.
Monday, September 21	First week of laboratory rotations. Sign up on Achieve and complete initial online activities prior to your first lab.
Saturday, October 4	Test #1, 2:00 pm – 4:00 pm (Locations TBA on OWL).
Monday, October 13	Thanksgiving (No class)
November 3-9	Fall Reading Week
Saturday, November 15	Test #2, 2:00 pm – 4:00 pm (Locations TBA on OWL).
Monday, December 1	Last day to drop the course without academic penalty.

## Course Website

Course material will be posted to OWL: <https://westernu.brightspace.com/>

Students are responsible for checking the course OWL site (<https://westernu.brightspace.com/>) regularly for news and updates. This is the primary method by which information will be disseminated to all students in the class.

If students need assistance with the course OWL site, they can seek support on the [OWL Brightspace Help](#) page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

## Learning Outcomes

This course emphasises skill development, such as critical thinking, problem solving, analysis, and quantitative reasoning; these transferrable skills are essential to success in not just chemistry but also in other courses and many occupations. By the end of Chem 1302A/B, students should be able to:

Discipline-Specific Outcomes	Transferrable-Skill Outcomes
Describe the importance of chemistry in everyday life and the interdisciplinary nature of chemistry.	Analyze and critically assess problems, and take a systematic approach to solve them.

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Use critical thinking skills to explain, make connections between and apply chemical principles, laws, and theories pertaining to ideal gases, thermodynamics, chemical equilibria, electrochemistry, and chemical kinetics.

Evaluate and assess chemical data and explain how they relate to chemical theories/laws.

Apply chemical theories or laws to solve a variety of new qualitative and quantitative chemical problems.

Conduct laboratory experiments and draw conclusions from collected experimental data and results.

Safely use a variety of laboratory equipment and instrumentation to perform experimental procedures and explain the underlying theory behind all of them.

Obtain, evaluate, and integrate information from various sources, and determine its relevance.

Work with others in an effective, practical, social, and ethical manner.

Prioritize a set of tasks and manage the use of your time.

Execute mathematical calculations accurately.

Communicate thoughts, ideas, and observations verbally and in writing.

Recognize when to seek assistance.

Develop respect for, and comply with, regulations and policies.

Accept responsibility for your decisions, actions, and non-actions.

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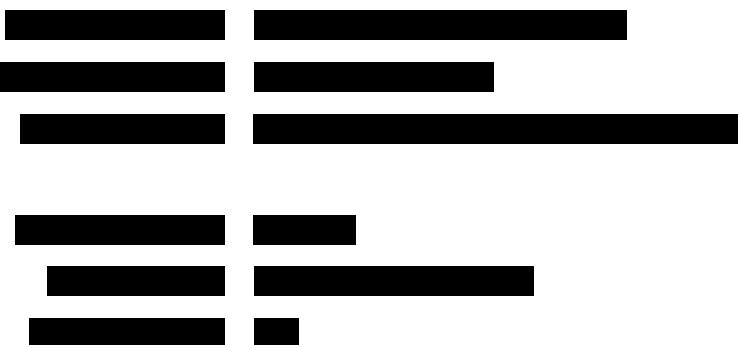
## *Teaching Team & Lecture Info*

Four course instructors, a lab coordinator, an undergraduate advising assistant, a lab technician, and several dozen teaching assistants (TAs) support your learning in this course.

**To contact any team member, please submit a service ticket at:**

<https://help.sci.uwo.ca/servicedesk/customer/portal/14>

Please do **not** email team members directly.



The ticketing system should only be used for administrative purposes. Tickets are triaged during regular business hours and answered in the order of importance. To allow your Chem 1302A/B team to respond to administrative concerns as quickly as possible, please do not send tickets containing:

- Questions that can be answered based on the information found in this course outline. Refer to the course outline first.

- Questions about course material. Such questions should be taken to the Resource Room or posted on the OWL forum.
- Requests for grade increases, extra assignments, make-up labs, etc. Refer to the section below entitled *Equal Opportunity and Evaluation Policy*.

Constructive feedback is valuable to us. Please contact us if you have any comments or feedback on Chem 1302A/B. We are always trying to improve the course so that you can have a great learning experience!

## *Learning Support & Resources*

### OWL Discussions

Collaboratively discuss course concepts and practice problems with your peers. TAs will also be participating in these discussions.

### Resource Room

The Resource Room, located in Materials Science Addition 1201, provides you with an informal environment to discuss chemistry questions with a highly qualified teaching assistant (TA) throughout the week. Group work and peer-to-peer support at these sessions are encouraged. Online sessions and sessions for lab-based questions will also be available. The schedule for these drop-in sessions will be posted on OWL.

### Instructors' Student Hours

Your course instructor has student hours (office hours) that can be scheduled **by appointment** through the ticketing system. Each course instructor supports many students, so please note that these hours are set aside for concerns (e.g. learning strategies, personal matters, etc.) that cannot be addressed through the OWL forums or the Resource Room. That way, if you have such concerns, you can be assured that you will have someone to talk to!

### Learning Development & Success

Learning-skills professionals at Learning Development & Success (LDS, <https://learning.uwo.ca/>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling. LDS also runs a Peer Assisted Learning Centre that you can check out!

### Note on Tutors

Before considering a tutor, check out the Resource Room! Private, third-party review or tutor services are not affiliated with, or endorsed by, the university. As such, the university cannot be responsible for any of the content they provide, even if the content causes you to answer exam questions incorrectly. Because of liability reasons, your instructors are not permitted to suggest or recommend any specific tutors.

Students should realize that they may not hire tutors who are Chemistry 1302A teaching assistants, even if they are not from your own lab section. This is a serious legal matter pertaining to conflict of interest.



## Course Materials

The following materials are **required** and can be found at Western's Dellelce Family Bookstore.

### Chemistry 1302A/B Course Workbook, 2025-26 edition

- This is the textbook and lecture note set for our course. This learning tool is designed by faculty in the Department of Chemistry and purchase information can be found at [this link](#). Since classes and assessments will be based on this year's edition, we strongly recommend using this year's edition.
- Read the relevant topics prior to class, bring your workbook with you to class, and complete the practice problems after class.

### Chemistry 1302A/B Laboratory Manual and Past Exams, 2025-26 edition

- This item includes a paper copy of the lab manual and past exams, *and* an access code to **Macmillan's Achieve platform**, which will be used for lab preparation and submissions. Purchase information can be found at [this link](#). The current edition is required.
- You will receive a **personalized link** to Achieve on OWL by Friday, September 19. Use this link (*and only your link!*), your access code from your lab manual, and your **@uwo.ca email** address to sign up on *Achieve* before your first lab.

### Lab Coat & Safety Glasses

- For your protection, safety glasses and a lab coat are required for the labs. You are welcome to bring ones that you already own. Scrubs or "consultation coats" are not acceptable because they are too short, do not offer enough protection, or are not sufficiently fire-resistant.
- Safety glasses can alternatively be purchased from Western's Chem Club and details will be provided on OWL.

### Scientific Calculator

- A basic scientific calculator may be used in the labs and on the test and exam. No programmable calculators (capable of storing notes, formulas, graphing, etc.), smartphones, nor other electronic devices may be used.

### Web-Enabled Device

- A phone, tablet, laptop or other web-enabled device will be used for the iClicker component during class. You can use Western's WiFi with your Western credentials.

## Course Topics

Our primary focus is on the *understanding* and *application* of these concepts. Accordingly, tests and exams are designed to evaluate your comprehension of the material and your ability to apply it to different scenarios, and not simply your ability to regurgitate memorized facts or substitute numbers into formulae.

Workbook Topic	Lecture Topic	Approximate Start Date
	Welcome & Introduction	September 5
1.1	Gases	September 8-12
1.2	The Ideal Gas Law*	
2.1	Heat, Work, and Energy	September 15-26
2.2	Enthalpy*	
2.3	Entropy and Spontaneous Change	
2.4	Free Energy	
3.1	The Equilibrium Constant*	September 29-October 17
3.2	Solubility of Ionic Compounds	
3.3	Weak Acids and Bases*	
<i>Reading Week</i>		<i>November 3-7</i>
3.4	Buffers Solutions*	October 20-22
4.1	Redox Reactions*	October 24-November 10
4.2	Voltaic Cells	
4.3	Electrolysis and Electrolytic Cells	
4.4	Batteries	
5.1	Reaction Rates and Rate Laws	November 12-November 21
5.2	Reaction Mechanisms and Arrhenius Equation*	

\*Review the pre-lesson module on OWL **prior** to discussing this topic in class

## Laboratory Information

### Access, Schedule, and Location

Our course has partnered with *Macmillan* for the lab component. Macmillan's Achieve platform will be used for lab preparation and submissions. You will be provided with a **personalized link** (via OWL) by September 19 to sign up on *Achieve*. You must sign up using **your** personalized link,

Western email address (@uwo.ca email address), and access code in your lab manual **before** your first lab.

The laboratory section in which you are registered is the only in-person section that you may attend. Your lab section number (along with day of the week and time for your lab) can be found on your **current timetable** on Student Centre. Refer to the schedule below to determine which weeks your experiments will occur, based on your lab section. Each course has its own lab schedule, so do not assume that your chemistry lab schedule will follow another course's schedule.

The location where you will be performing your labs will be posted on OWL by September 19. ■■■■■

Experiment	Prelab* Opens Online 9:00 am	In-Person Lab Session			Post-Lab Smart Worksheet Due 11:55 pm
		Lab Sections 13 & 15	Lab Sections 14 & 16	Lab Section 022	
#1 Calorimetry of Reactions and Heat Transfer	September 19	September 22	September 29	October 7	October 14
#2 Determination of an Equilibrium Constant	October 3	October 6	October 20	October 21	October 28
#3 Spectrophotometric Determination of the $K_a$ and Concentration of Bromocresol Green	October 24	October 27	November 10	November 11	November 18
#4 Redox Analysis of Iron Supplements	November 14	November 17	November 24	November 25	December 2

*\*Your pre-lab exercise must be completed online prior to your lab experiment, regardless of the default date listed on Achieve. Proof of completion must be shown upon entering your in-person lab.*

## Preparation and Report Submission

Prior to your **first** experiment (and **after** receiving your personalized link on September 19):

**Enroll** on Macmillan's *Achieve* Platform.

1. Use personalized link on OWL Grades.
2. Activate with code in lab manual.
3. Register using your @uwo.ca email address.

**Complete** lab conduct agreement and **review** Smart Worksheet activities within Lab Overview materials on Achieve.

**Read** Safety Regulations, Introduction, and Significant Figures sections in your lab manual.

For **each** experiment:

**Read** Background, Strategy & Procedure sections in your lab manual.

**Submit** **Pre-Lab** activity on Achieve. **Bring** proof of completion to your lab.

**Attend** your in-person lab. **Bring** your lab manual and calculator. **Dress** appropriately, including safety glasses and lab coat.

**Record** your data in your lab manual. **Submit** your **Submit-in-Lab Sheet** to your TA before leaving the lab.

**Submit** Post-Lab activities within the **Smart Worksheet** on Achieve, using **your** data, by the due date.

You are encouraged to submit your lab report components well in advance of the due date. **Only one submission attempt is possible** for each lab by the due date.

**Each lab submission has three parts:**

1. A **Pre-Lab** exercise that is completed on Achieve *prior* to your lab session.
2. A **Submit-in-the-Lab Sheet** that is handed in to the lab TA at the end of your lab session.
3. A **Smart Worksheet** post-lab activity that is completed on Achieve with *your* lab data *after* your lab session.

Obviously, you can only submit a Smart Worksheet Post-Lab activity if you attended the in-person lab. Submission of any Smart Worksheet Post-Lab activities without lab is considered a **fraudulent assignment** and may be investigated in accordance with the Western's policy on scholastic offences.

If you have a lab-based question or concern and you are in your lab, ask your lab TA. Otherwise, visit the Lab Resource Room. If your concern remains, visit the lab coordinator, [REDACTED]

[REDACTED] If the coordinator is unable to resolve your concern, appeal in writing via the ticketing system.

## Safety and Dress Code

Western is committed to workplace health and safety and has strict safety regulations. Lab TAs and staff will remove students who, in their opinion, do not meet the safety requirements or are not prepared. These students, like those who arrive late, will not be permitted to do the experiment, and thus will receive a grade of zero for their Submit-in-the-Lab sheet and smart worksheet.

Safety glasses or goggles must be worn whenever you are in the laboratory. Students who wear prescription glasses must wear appropriate safety glasses or goggles designed to fit over their regular glasses. If you wear contact lenses, you must inform the lab TA. For your safety, headphones are not permitted in the lab.

Western mandates "shoulder-to-toe" coverage in a lab. Details are found in the lab manual. Everyone must wear a buttoned-up lab coat at all times in the laboratory. Everyone must wear ankle-length pants, socks that cover the ankle, and shoes that cover the whole foot (top, sides, and back) without any mesh areas or "cutout holes". Shorts, sandals, crocs, and capris are among the items of clothing that are not acceptable. No skin may show at the ankles even when you are seated. Pants with rips or tears, or leggings with mesh panels, are not acceptable. For hygienic reasons, shoes, socks, pants, lab coats, and safety glasses are **not** available for rent.

## Lateness Policy

Any student who arrives after the doors to the lab have closed, when the "TA talk" begins, is considered late and will not be permitted to do the experiment. Late students will be assigned a mark of zero for the entire experiment. It may be possible to replace the mark of zero by writing a lab make-up quiz (see later).





## Evaluation

### Components

Your overall course grade, to a maximum of 100, will automatically be the higher grade calculated using Method 1 and Method 2.

Component	Notes	Weight (%)	
		Method 1	Method 2
OWL Intro Activity	Due Friday, September 19 at 11:55 pm on OWL. This activity will help you become familiar with the course and background concepts. You will have 5 attempts and must earn 80% on an attempt to obtain this 1% towards your course grade.	1	1
OWL Pre-Test	Due Friday, September 19 at 11:55 pm on OWL. This pre-test is based on high school chemistry. Regardless of your score on this pre-test, if you complete this activity by the due date, you will obtain this 1% towards your course grade.	1	1
iClicker	Questions are graded for participation only. As long as you answer at least 70% of the questions, you will earn 2.0/2.0. If you answer less than 70% of the questions, the weight of the iClicker component will be shifted to the Final Exam.	2	2
Team-Based Problem-Solving Modules	Best 5 out of 6 modules (1.0 each)	5	5
Laboratory	Four in-person experiments, with online and in-person submissions (4.0 each).	16	16
Midterm Tests	Test #1: Saturday, October 4, 2:00 pm – 4:00 pm Test #2: Saturday, November 15, 2:00 pm – 4:00 pm		
	Higher Test Score (%)	30	30
	Lower Test Score (%)	5	0
Final Exam	Registrar-scheduled, 3.00 hours	40	45
Bonus	Research survey participation, as announced on OWL at the beginning and end of term (2 surveys x 0.5% per survey)	1 bonus	1 bonus

### Essential Learning Requirements

To receive a passing grade for Chem 1302A/B, you must fulfill all three of these conditions:

1. Obtain a minimum overall course grade of 50%.
2. Obtain a minimum of 50% on the laboratory component (8.0/16.0). This mark is calculated from all four experiments. A missed experiment is assigned a mark of zero unless the mark has been replaced by the mark obtained on a lab make-up quiz (see section on Missed Course Components.)
3. Miss no more than two experiments, even if the marks for the missed experiments are replaced by the marks on the make-up quizzes. That is, you must do at least two labs.

Students who fail to meet requirements #2 or #3 will receive a course grade no greater than 40%, even if their calculated course grade is higher.

## iClicker

In order to receive credit for the iClicker component, you must:

- Create a free iClicker account using your **Western email address**. Please refer to the instructions at <https://wts.uwo.ca/iclicker/>. You should automatically be added to your Chem 1302A section. If not, you can manually add this course to your account.
- If you already have an iClicker account, please go into the settings and verify that it uses your **@uwo.ca** email address.
- Attend, and answer iClicker questions in your lecture section.
- Ensure that your web-enabled device is working properly. If it is not working, try refreshing the page or restarting the app. It is your responsibility to ensure that your device is working properly. Contact Western Technology Services if you require assistance.

## Team-Based Problem-Solving Modules

These activities are designed to engage you and your team in discussion of course concepts and problem-solving strategies related to the team exercises in your workbook.

You must work through these modules using your own OWL account. Your grade on these activities is based on completing the modules and then acknowledging each module completion via an OWL Quiz. Submitting an OWL Quiz without completing the associated module is considered a fraudulent submission and may be investigated.

You can select your own team members (teams of 2-4 students) or find a team via OWL Groups. You are encouraged to meet with your team in-person (or virtually) to complete each module, but if circumstances require you to complete a module independently, this is permitted. There is no designated class for the Team module. You may use any time or location that works for your team, such as a library study space, residence, Zoom, or any other WiFi enabled location. Below is the schedule for these modules:

Module	Available	Due
Chapter 1	September 10	September 17
Chapter 2	September 24	October 1
Chapter 3A	October 8	October 15
Chapter 3B	October 22	October 29
Chapter 4	October 29	November 12
Chapter 5	November 19	November 26

## Midterm Tests and Final Exam

The midterm tests and final exam are multiple-choice and will cover the content from the workbook and lab experiments, as announced in class. The final exam will be cumulative.

A data and formula sheet will be provided, along with a periodic table. You will be permitted to use a basic scientific calculator. Proctors and instructors for tests and exams do not lend calculators. It is your responsibility to ensure your calculator is in proper working order (consider bringing a spare calculator, just in case). Obviously, you will not be allowed to share calculators during tests and exams.

The tests and exam are marked using bubble sheets via the Gradescope platform (linked to OWL). You are responsible for filling out the sheets correctly during the test time. No additional time will be provided to fill out your bubble sheet, and students must comply with proctor's instructions when the test time has elapsed.

## Equal Opportunity and Evaluation Policy

We are here to help you achieve your goals. We want you to do well in the course. We were, at one time, students ourselves, so we understand the importance of course grades and the hard work that you will invest into this course.

Most importantly, we must be fair. Your instructors committed to academic integrity. All students will be treated equally and evaluated using the criteria presented in this course outline and their respective weights. The evaluation criteria are based strictly on actual achievement, not on effort or how hard the student tried. Claims of an excellent academic history, of attendance in the course components, or of personal issues (family, relationship, financial, etc.) cannot be used to justify a higher grade in the course because they are not criteria for evaluation. There is no extra work available for extra credit.

The requirement for a higher grade in order to, for example, maintain a scholarship, enter a program, or obtain a higher GPA for various reasons, is not a justifiable reason for increasing your grade. If we increased or "bumped" your grade (*i.e.*, gave you a grade that you did not legitimately earn), it would be unfair to the other students and also a great disservice to the scholarships and programs that are evaluating all students on the basis of their grades. Please do not ask us for a grade increase.

## *How to Achieve Your Goals in Chem 1302A*

You will be more successful in the course if you do the following:

1. Study the material and do practice problems **at least twice each week**. Like many sciences, chemistry is a cumulative subject, and one topic acts as a foundation for the next, so it is **essential to stay up-to-date** with the material.
2. Work with your **team** to complete the team-based problem-solving modules. **Discuss** the questions, **clarify** concepts, and **explain** your problem-solving approach with one another.

3. Learn **why** something is the way it is, not just **what** it is. Please realize that memorization is not the same as learning and understanding. When working on questions from the workbook, focus on the concepts, the thought process, how to arrive at the answer, and why the answer is the answer.
4. Don't just attend lecture – get something out of the experience! **Think. Engage. Write** down key points. **Sketch** out connections. Record any questions you have and **follow up** on those questions.
5. Visit the **Resource Room** or post your questions to the **OWL Discussion**. Ask these questions as they arise rather than waiting until just before an assessment.
6. Labs are intended to be an enjoyable experience. **Prepare** for each lab in advance by reading the lab manual and doing the prelab exercise. **Think** and **ask** about the theory and the concepts behind the experiment. Be mindful of the details. **Chat** with your TA if you have any questions or ideas.
7. Complete **all** the **practice problems** in the workbook for each topic. Work through the previous year's tests and exams under simulated test conditions to evaluate your studying, knowledge, and application abilities. Avoid just checking the answers – let yourself think and try different approaches before looking for hints. Again, visit the online resource room to discuss any concepts or questions.

## *Late or Missed Coursework*

Students must familiarize themselves with the *University Policy on Academic Consideration – Undergraduate Students in First Entry Programs* posted on the Academic Calendar:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/academic\\_consideration\\_Sep24.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf),

This policy does not apply to requests for Academic Consideration submitted for attempted or completed work, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult [Accessible Education](#).

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage: [https://registrar.uwo.ca/academics/academic\\_considerations/](https://registrar.uwo.ca/academics/academic_considerations/)

All requests for Academic Consideration must be made within **48 hours** after the assessment date or submission deadline.

All Academic Consideration requests must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make **one** Academic Consideration request **without supporting documentation** in this course. However, the following assessments are excluded from this, and therefore always require formal supporting documentation:







- Examinations scheduled during official examination periods

When a student *mistakenly* submits their one allowed Academic Consideration request without supporting documentation for the assessments listed above or those in the section below that do not require academic consideration, the request cannot be recalled and reapplied. This privilege is forfeited.

Because the following components already have built-in flexibility, academic consideration requests will be denied for these:

- OWL Intro Activity (automatic 48 h extension)
- OWL Pre-Test (automatic 48 h extension)
- iClicker questions (shifting weight to the Final Exam if participation is under 70%)
- Team modules (automatic 48 h extension, best 5/6 modules count)
- First missed test (Test #1 *or* Test #2, evaluation Method 2 applies)
- First missed lab component (lab attendance *or* smart-worksheet submission over 48 h late; write lab make-up quiz)

Students are expected to submit their assignments by the due dates listed in the course outline and attend all labs, the midterm tests and final exam. Should extenuating circumstances apply, refer to the following table for applicable policies and actions. By policy, instructors may deny Academic Consideration requests for assessments with built-in flexibility, as specified below. Academic consideration is only required when specified below.

Policies & Actions		
Missed Course Component	 = Built-In Flexibility  = Obtain academic consideration	
<b>OWL Intro Activity</b>	You may submit your OWL Intro Activity and/or OWL Pre-test up to 48 h after the due date with no penalty. No academic consideration is required (nor considered).	
<b>OWL Pre-Test</b>	A missed OWL Intro activity or OWL Pre-test (not submitted by the due date nor 48 h following) will result in a mark of zero with no opportunity for make-up.	
<b>iClicker/ Lectures</b>	<p>We understand that you may not be able to attend class from time to time. The participation-based iClicker marking scheme is designed to account for the occasional missed class or technical difficulty. <b>Therefore, iClicker marks will not be adjusted for these reasons.</b></p> <p>If you are unable to answer at least 70% of the iClicker questions, the weight of the iClicker component will <b>automatically</b> be shifted to your final exam. As this is done automatically, no action on your end is necessary.</p>	
<b>Team-Based Problem-Solving Modules</b>	<p>You may submit your module completion quiz up to 48 h after the due date with no penalty. No academic consideration is required (nor considered).</p> <p>Your best 5 of 6 module grades will be included towards your course grade. Thus, your <b>first</b> missed module will automatically be excused. Additional missed modules will earn a grade of zero and academic consideration will not be considered.</p>	
<b>Laboratory</b>	<p>There are no make-up labs, and it is not possible to reschedule them.</p> <p>Tests and exams will contain questions related to the theoretical aspects of the experiments. You are still responsible for the material pertaining to the missed labs.</p> <p>You may submit your smart worksheet submission up to 48 h after the due date with no penalty. No academic consideration is required (nor considered).</p>	

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If you miss an in-person lab session, or your smart worksheet submission is over 48 h late, you are deemed to have **missed a lab component**.

**Laboratory  
(continued)**

**First missed lab component:**

Academic consideration is not required (nor considered) for your first missed lab component (either a missed lab or a submission over 48 h late). Plan to write the lab make-up quiz for this lab (see below).



**Second missed lab component:**

**Obtain academic consideration** for a second missed lab component (either a missed lab or a submission over 48 h late, regardless of what your first missed lab component was). Upon academic consideration, plan to write a second lab make-up quiz for this second impacted lab (see below).



**Lab Make-Up Quiz:**

You must sign-up using the survey link on OWL to take a lab make-up quiz at the end of the term. The deadline to sign-up is December 2. The lab make-up quiz(es) will be held around December 8; watch for an OWL announcement with details. The grade you earn on the lab make-up quiz(es) will replace your grade(s) for the associated experiment(s). You may write a maximum of two lab make-up quizzes.

As per the evaluation policy in this course, you must complete at least two in-person labs and pass the lab component of this course to be eligible to pass this course. If you miss more than two labs, reach out to your home faculty academic advisor.

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**Midterm  
Tests**

Due to built-in flexibility, **there are no make-up tests**.

Your **higher** score (by percentage) from Test #1 and Test #2 will automatically count towards your 30% midterm test course component. Your **lower** score from Test #1 and Test #2 will only count towards your course grade if it increases your course grade (i.e. Method 1, 5% weight or Method 2, 0% weight).

A missed test is assigned a mark of zero, so a missed test will automatically be the lower-scoring test.

**Missed one test (Test #1 or Test #2):**

No academic consideration is required (nor considered). Evaluation **Method 2** will automatically apply: your higher scoring test (the test you wrote) will count as 30%, and your missed test will count as 0%.



**Missed both tests (Test #1 and Test #2)**

Obtain **academic consideration** for the date of Test #2. Upon obtaining academic consideration, the weight of the midterm tests will automatically shift to your final exam.



Please do **not** contact your instructor nor submit a ticket, even though your academic consideration may state that you must do so. We will automatically be notified of the academic consideration and calculate your grade accordingly.

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## Final Exam

If you miss the final exam, obtain **academic consideration (\*with documentation)**. Academic consideration without documentation does not apply. Then, plan to write the **Special Exam** (the name given by the university to a make-up Final Exam) in January of 2026. See the Academic Calendar for details (under [Special Examinations](#)), especially for those who miss multiple final exams within one examination period. If you do not obtain academic consideration, a grade of zero applies.



Please do **not** contact your instructor nor submit a ticket, even though your academic consideration may state that you must do so. We will automatically be notified of the academic consideration.

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see [https://registrar.uwo.ca/academics/examinations/exam\\_conflicts.html](https://registrar.uwo.ca/academics/examinations/exam_conflicts.html)).

If you miss the **Special Exam**, you will need to obtain **academic consideration** again. If it is granted, the date of the next Special Exam will normally be the scheduled date for the Final Exam the next time this course is offered. The maximum course load for the term in which the Special Exam is granted will be reduced accordingly. Please see the section on Special Exams in the Academic Calendar for details: [https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#SubHeading\\_70](https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#SubHeading_70)

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## Academic Policies and Legalities

The website for Registrar Services is <http://www.registrar.uwo.ca>.

### Use of Western @uwo.ca email

In accordance with policy, [https://www.uwo.ca/univsec/pdf/policies\\_procedures/section1/mapp113.pdf](https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf), the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

It is university policy that a regularly scheduled class (lecture, lab, or tutorial) takes precedence over tests and exams. Therefore, if another course schedules a test or exam that takes place during your chemistry lecture or lab, the instructor for that course must accommodate you.

### Use of Electronic Devices During Assessments:

In courses offered by the Faculty of Science, the possession of unauthorized electronic devices during any in-person assessment (such as tests, midterms, and final examinations) is strictly prohibited. This includes, but is not limited to: mobile phones, smart watches, smart glasses, and wireless earbuds or headphones. Unless explicitly stated otherwise in advance by the instructor, the presence of any such device at your desk, on your person, or within reach during an assessment will be treated as a scholastic offence, even if the device is not in use. Only devices expressly permitted by the instructor (e.g., non-programmable calculators) may be brought into the assessment room. It is your responsibility to review and comply with these expectations.

**Use of Generative AI Tools:** Unless otherwise stated, the use of generative AI tools (e.g., ChatGPT, Microsoft Copilot, Google Gemini, or similar platforms) is not permitted in the completion of any course

assessments, including but not limited to: assignments, lab reports, presentations, tests, and final examinations. However, you are welcome to use AI while studying chemistry concepts.

### Scholastic Offences

Policy on Scholastic Offences:

[https://uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_offences.pdf](https://uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_offences.pdf)

Procedures on Scholastic Offences (Undergraduate):

[https://uwo.ca/univsec/pdf/academic\\_policies/appeals/undergrad\\_scholastic\\_offence\\_procedure.pdf](https://uwo.ca/univsec/pdf/academic_policies/appeals/undergrad_scholastic_offence_procedure.pdf)

Computer-marked, multiple-choice tests and/or exams will be subject to submission for **similarity review** by software that will check for unusual coincidences in answer patterns that may indicate cheating.

### Requests for Relief (formally known as “appeals”)

Policy on Request for Relief from Academic Decision:

[https://uwo.ca/univsec/pdf/academic\\_policies/appeals/requests\\_for\\_relief\\_from\\_academic\\_decisions.pdf](https://uwo.ca/univsec/pdf/academic_policies/appeals/requests_for_relief_from_academic_decisions.pdf)

Procedures on Request for Relief from Academic Decision (Undergraduate):

[https://uwo.ca/univsec/pdf/academic\\_policies/appeals/undergrad\\_requests\\_for\\_relief\\_procedure.pdf](https://uwo.ca/univsec/pdf/academic_policies/appeals/undergrad_requests_for_relief_procedure.pdf)

An audience response system (iClicker) will be used to provide immediate feedback on your understanding of course concepts. You must use your own iClicker account and may not submit responses for any other student. The data collected using the devices will not be used for research purposes without your consent.

The Midterm Test and Final Exam are **in-person assessments**. In the event that one or more of these assessments need to be conducted online due to any university-declared emergency, they may be conducted using a remote proctoring service. By taking this course, you are **consenting** to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western’s Remote Proctoring website at: <https://remoteproctoring.uwo.ca>.



## *Accessibility and Accommodation*

Please contact the course instructor if you require lecture or printed material in an **alternate format** or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at [http://academicsupport.uwo.ca/accessible\\_education/index.html](http://academicsupport.uwo.ca/accessible_education/index.html) if you have questions regarding accommodation.

Students with disabilities are encouraged to contact **Accessible Education**, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic\\_Accommodation\\_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf).

When conflicts arise with a **religious holiday** that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing to the Academic Advising office of their Faculty of Registration **and** contact their instructor by submitting a ticket to the Chemistry Course Support. This notice should be made as early as possible but not later than two weeks



prior to the writing or the examination (or one week prior to the writing of the test). Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays: <https://www.edi.uwo.ca>.

## *Support Services*

Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic considerations for absences, requests for relief, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/advising/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://www.uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at [https://www.uwo.ca/health/student\\_support/survivor\\_support/get-help.html](https://www.uwo.ca/health/student_support/survivor_support/get-help.html). To connect with a case manager or set up an appointment, please contact [support@uwo.ca](mailto:support@uwo.ca).

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <https://www.uwo.ca/se/digital/>.

Additional student-run support services are offered by the USC, <http://westernusc.ca/your-services/>.

This course is supported by the Science Student Donation Fund. If you are a BSc or BMSc student registered in the Faculty of Science or Schulich School of Medicine and Dentistry, you pay the Science Student Donation Fee. This fee contributes to the Science Student Donation Fund, which is administered by the Science Students' Council (SSC). One or more grants from the Fund have allowed for the purchase of equipment integral to teaching this course. You may opt out of the Fee by the end of September of each academic year by completing the online form hosted on the Faculty of Science's Academic Advising website. For further information on the process of awarding grants from the Fund or how these grants have benefitted undergraduate education in this course, consult the chair of the department or email the Science Students' Council at [ssc@uwo.ca](mailto:ssc@uwo.ca).