Chemistry 1302B • Winter 2022-23
Discovering Chemical Energetics

Welcome to Chem 1302B!

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

Course Description & Prerequisite Requirements

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 your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Dates to Note

Dates in 2023	Event
Monday, January 9th	Course begins. Attend your first Chem 1302B class!
Tuesday, January 17th	Last day to add a second-term half course OR make changes to lab section enrolment.
Friday, January 20th	OWL Intro Activity and OWL Pre-Test due by 11:55 pm. First Team-Based Problem-Solving designated class time. Lab location and personalized Achieve lab site link available on OWL *PostEm*. Sign up on Achieve prior to your first lab.
Monday, January 23rd	First week of laboratory rotations.
February 18th – 26th	Family Day and Spring Reading Week.
Saturday, March 4th	Midterm Test, 2:00 – 4:00 pm (Locations TBA on *PostEm*).
Tuesday, March 7th	Last day to drop the course without academic penalty.

Course Website

Course updates and materials will be posted on OWL (http://owl.uwo.ca), Western's learning management system. Thus, you are responsible for checking OWL on a frequent basis. If you need technical assistance with OWL, seek support on the OWL Help page. Alternatively, contact the Western Technology Services Helpdesk by phone at 519-661-3800 or extension 83800.

Teaching Team & Contact

Four course instructors, a lab coordinator, a counselling assistant, an undergraduate assistant, a lab technician, and several dozen teaching assistants (TAs) contribute to this course and are here to support your learning.

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.

	Team Member	Lecture/ Office Location	Lecture Times	Lecture Section
Instructors	Dr. Jamie Noel	NSC-145	MWF 9:30 am – 10:20 am	002
	Dr. Yang Song	NSC-145	MWF 10:30 am – 11:20 am	003
	Dr. Ken Yeung	NSC-145	MWF 12:30 pm – 1:20 pm	004
	Dr. Christina Booker*	NCB-101	MWF 1:30 – 2:20 pm	005
Lab Coordinator	Dr. M. Naeem Shahid	MSA 1235	**Course Coordinator*	
Undergraduate Assistant	Evan Brandis	CHB 119		
Counselling Assistant	Diana Ali	CHB 119		

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 1302B 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 1302B. We are always trying to improve the course so that you can have a great learning experience!

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 1302B, 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. 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.	Analyze and critically assess problems, and take a systematic approach to solve 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.

Learning Support & Resources

Resource Room

The Resource Room 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. Resource Room sessions for lab-based questions will also be available.

The schedule and location for these drop-in sessions will be posted weekly on OWL. Both in-person and online options will be available.

OWL Forums

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

Instructors' Student Hours

Course instructors have 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!

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 1302B teaching assistants, even if they are not from your own lab section. This is a serious legal matter pertaining to conflict of interest.

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.

Course Materials

The following materials are **required** and can be found at the Western Bookstore.

Chemistry 1302B Course Workbook, 2022-23 edition

- This is the textbook and lecture note set for our course. This learning tool is designed by faculty in the Department of Chemistry. Classes and assessments will be based on **this year's edition**.
- Read the relevant topics prior to class, bring your workbook with you to class, and complete the practice problems within after class.

Chemistry 1302B Laboratory Manual and Past Exams, 2022-23 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. The current edition is required.

- You will receive a **personalized link** to Achieve on OWL *PostEm* by the evening of Friday, January 20th. 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.
- Safety glasses can alternatively be purchased from Western's Chem Club and details will be provided on OWL.
- Scrubs or "consultation coats" are not acceptable because they are too short, do not offer enough protection, or are not sufficiently fire-resistant.

Sharp EL-510 Series Scientific Calculator

- To ensure fairness to everyone in the course, **only** the Sharp EL-510R, EL-510RN, EL-510RT, or EL-510RTB calculator models are permitted in the labs and during tests and exams. **No other calculators are permitted.**

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	January 9
1.1	Gases	January 11
1.2	The Ideal Gas Law*	
2.1	Heat, Work, and Energy	January 18
2.2	Enthalpy*	
2.3	Entropy and Spontaneous Change	
2.4	Free Energy	
3.1	The Equilibrium Constant*	February 1
3.2	Solubility of Ionic Compounds*	
3.3	Weak Acids and Bases*	
	Reading Week	*February 18-26*
3.4	Buffers Solutions*	
4.1	Redox Reactions*	March 13
4.2	Voltaic Cells	
4.3	Electrolysis and Electrolytic Cells	
4.4	Batteries*	
5.1	Reaction Rates and Rate Laws	March 27
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 *PostEm*) on January 20th 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. Missed labs will result in a mark of zero unless academic consideration has been granted.

The **location** where you will be performing your labs will be posted on **OWL *PostEm*** by the evening of January 20th. The possible locations include Zones A, B, C, and D of Materials Science Addition 1220 and Chemistry Building 110.

Experiment	**Prelab* Opens Online**	**Lab Held (Lab Section ends in 1, 3, or 5)**	**Lab Held (Lab Section ends in 2, 4, or 6)**	**Post-Lab Smart Worksheet Due**
#1 Calorimetry of Reactions and Heat Transfer	January 22, 9:00 am	Week of January 23	Week of January 30	February 10, 11:55 pm
#2 Determination of an Equilibrium Constant	February 5, 9:00 am	Week of February 6	Week of February 13	March 3, 11:55 pm
#3 Spectrophotometric Determination of the Ka and Concentration of Bromocresol Green	February 26, 9:00 am	Week of February 27	Week of March 6	March 17, 11:55 pm
#4 Redox Analysis of Iron Supplements	March 12, 9:00 am	Week of March 13	Week of March 20	March 31, 11:55 pm

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 any in-person lab.*

Preparation and Report Submission

Prior to your *first* experiment:

Enroll on Macmillan's *Achieve* Platform.
1. Use personalized link on OWL PostEm.
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. Second-attempt requests will not be granted without academic consideration.

Each lab report 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, Dr. Naeem Shahid, in MSA 1235. 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.

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, 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. A mark of zero will be assigned for that experiment.

Evaluation

Components

Your overall course grade, out of 100, will automatically be the higher of the two grades calculated by the two methods shown below.

Component	Notes	Method #1 Weight (%)	Method #2 Weight (%)
OWL Intro Activity	Due Friday, January 20 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% to obtain this 1% towards your course grade.	1	1
OWL Pre-Test	Due Friday, January 20 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	iClicker questions will be posed during lectures. Questions are graded for participation only. The score you receive will be based on the percentage of iClicker questions you answer: ≥ 75% = 5 45-54% = 2 65-74% = 4 35-44% = 1 55-64% = 3 < 35% = 0	5	5
Team-Based Problem-Solving Modules	Six modules, graded for completion (1% each).	6	6
Laboratory	Four in-person experiments, with online and in-person submissions (4% each).	16	16
Midterm Test	Saturday, March 4, 2:00 – 4:00 pm	29	16
Final Exam	Registrar-scheduled, 3.00 hours	42	55

Requirements for Passing Chem 1302B

To obtain credit for the course, all three requirements below must be met:

1. Obtain a minimum overall course grade of 50%.
2. Obtain a minimum of 50% on the laboratory component (8.00/16.00). This mark is calculated from all four experiments. A missed experiment is assigned a mark of zero unless it has been "excused" (see section on Missed Course Components.)
3. Miss no more than two experiments, whether excused or not.

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) and will not receive credit for the course.

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://presswestern.uwo.ca/ and on OWL. Add **your section** of Chem 1302B to your iClicker 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, the lecture section in which you are registered. Questions answered in the incorrect lecture section may not count towards the total number of questions that you answer.
- 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. You will work with your team throughout the term to complete 6 modules (accessed through OWL) that contain team-based exercises from your workbook. You must use your **@uwo.ca email address** to earn your completion grade on these modules.

You can select your own team members (teams of 2-5 students) or submit a survey on OWL to be assigned to a team at the beginning of the term. 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.

Class time and space is reserved for you to work with your team to complete these modules, but 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	Designated class	Due
Chapter 1	January 16	January 20	January 23
Chapter 2	January 30	February 3	February 6
Chapter 3A	February 13	February 17	February 27
Chapter 3B	March 6	March 10	March 13
Chapter 4	March 20	March 24	March 27
Chapter 5	April 3	April 10	April 10

Midterm and Final Exam

The midterm test 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 SHARP-EL510 series scientific calculator. All other brands and Sharp models will be confiscated. Proctors and instructors for tests and exams do not lend calculators. It is your responsibility to bring the correct calculator and to ensure that it is in proper working order. It is a good idea to bring a spare calculator of the same model. Obviously, you will not be allowed to share calculators during tests and exams.

The date of the midterm test is close to the last day to withdraw from the course without academic penalty. To provide you with an immediate indication of your midterm test score, an extra five minutes will be provided for the 2.0 h test to give you time to ensure your bubbled Scantron responses are also indicated in your test booklet. You will be permitted to take your test booklet with you and can self-check your preliminary test score using an answer key that will be posted on OWL that same day. Your official midterm test score will be released on OWL as soon as possible after the midterm test, once the teaching team has processed the Scantrons and analyzed the statistics for each question. This arrangement has been approved by the dean's office in the Faculty of Science.

The Scantron machine does not make errors when reading your bubbled answers. However, if you wish to view your submitted Scantron after your score is released on OWL, download a Scantron request form from OWL and submit it through the ticketing system no later than two weeks after the release of your mark.

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. The university is committed to academic integrity and has high ethical and moral standards. 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 or to "make up" another grade. We do not offer any extra assignments, essays, experiments, or other work of any kind to any student.

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.

Student Absences and Missed Course Components

Students who experience an extenuating circumstance (such as illness, injury, or disability) sufficiently significant to temporarily render them unable to meet academic requirements may submit a request for academic consideration. There are two methods for obtaining academic consideration:

- For students who are registered with Accessible Education, and whose reason for missing a course component is related to a disability that is on file, please contact Accessible Education, except where stated. They will then contact us to acknowledge the course component you have missed.
- In all other cases, except where stated, requests must be made through the Academic Counselling unit or Dean's Office of your home faculty or affiliated college, regardless of the circumstances or the value of the missed work.

If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in NCB 280, and can be contacted at 519-661-3040 or through the ticketing system on their website: https://www.uwo.ca/sci/counselling/

If you are a student from another faculty, please contact the Academic Counselling Office of your Faculty.

Students should note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences must be submitted to the Academic Counselling unit or Dean's Office of your home faculty or affiliated college**.

For more information, please consult Western's policy on academic consideration for illness: https://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_135

For the Student Medical Certificate (SMC), please see: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

Religious Accommodation: When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult the University's list of recognized religious holidays (updated annually) at https://multiculturalcalendar.com/ecal/index.php?s=c-univwo.

Missed Course Component	Policies & Actions  = Obtain academic consideration  = Submit a ticket
OWL Intro Activity **OWL Pre-Test**	A missed OWL Intro activity or OWL Pre-test will result in a mark of zero with no opportunity for make-up. However, if extenuating circumstances apply, submit a **ticket** requesting to be excused from these activities within 5 days of the missed activity. Upon approval by an instructor, you will be granted the completion mark(s). 
iClicker/ Lectures	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. **Therefore, iClicker marks will not be adjusted for an occasional missed class.** If you have missed **more than 5 classes**, obtain **academic consideration** and submit a **ticket** to inform the teaching team. Upon receipt, your iClicker mark will be adjusted at the end of the course to excuse you from these iClicker questions.  
Team-Based Problem-Solving Modules	Your **first** missed module will automatically be excused and your grade on this course component will be based on the other five modules. **No action is required.** If you miss a **second** (or additional) module, you must obtain academic consideration to be **excused**, which will result in the weight of this component being shifted towards your other modules. Otherwise, a grade of zero applies.  Please **do not** contact your instructor or submit a ticket, even though your academic consideration may state that you must do so. We will automatically be notified of the academic consideration.
Laboratory	**Missed Lab Experiment:**  There are no make-up labs, and it is not possible to reschedule them. If you miss a lab, obtain **academic consideration**. Upon academic consideration, the missed lab will be **excused** and its weight will be distributed over all of the other labs. If academic consideration is not obtained, the missed lab will be given a mark of zero. 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. Please **do not** contact your instructor or submit a ticket, even though your academic consideration may state that you must do so. We will automatically be notified of the academic consideration.

Laboratory *(continued)*	**Attended lab experiment, but missed submission of post-lab smart worksheet by due date:** Obtain **academic consideration**, then submit a **ticket** with your proof of academic consideration to request an extension. It will then be your responsibility to submit your lab components by the **extended due date**. Late lab reports will not be accepted without academic consideration.	 
Midterm Test	If you miss the midterm test, obtain **academic consideration**. Then, plan to take the **Make-Up Test** on **Friday, March 10, 6:00 – 8:00 pm**. Please do **not** contact your instructor or submit a ticket, even though your academic consideration may state that you must do so. We will automatically be notified of the academic consideration. If you miss the **make-up test**, obtain **academic consideration**. Upon obtaining academic consideration for both the midterm and make-up tests, the weight of this assessment will shift to your final exam.	
Final Exam	If you miss the final exam, obtain **academic consideration**. Then, plan to write the **Special Exam** (the name given by the university to a make-up Final Exam) in May of 2023. If you do not obtain academic consideration, a grade of zero applies. Please do **not** contact your instructor or 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). 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	

How to Achieve Your Goals in Chem 1302B

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 forum. 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* of 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.

Academic Policies and Legalities

The website for Registrarial Services is http://www.registrar.uwo.ca.

In accordance with policy, 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.

Aside from the specified calculator, no other electronic devices (phones, iPods, etc.) may be used during tests and exams, even for timekeeping purposes. They may not be at your test/exam desk or in your pocket. Any student found in possession of these prohibited devices will receive a mark of zero on the test or exam.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at this website: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.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.

Audience response systems ("clickers") will be used to provide immediate feedback on your understanding of course concepts. You must use your own clicker 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.

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for

students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructors.

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 COVID-19, they may be conducted using a remote proctoring service such as Proctortrack that is approved by Western University. 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, such as these listed here https://www.proctortrack.com/tech-requirements. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at:
https://registrar.uwo.ca/academics/examinations/remote_proctoring/index.html and
https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf.

Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: https://www.uwo.ca/sci/counselling/.

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 519-661-2147 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 university's policy on Accommodation for Students with Disabilities can be found here:
https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic%20Accommodation_disabilities.pdf.

The university's policy on Accommodation for Religious Holidays can be found here:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf.

Learning-skills professionals at Learning Development & Success (https://www.uwo.ca/sdc/learning) 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. Online resources are available.

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.
To connect with a case manager or set up an appointment, please contact mailto:support@uwo.ca.

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 Counselling 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.