

## Organic Chemistry I (CHEM 2273), Fall 2025 Course Outline

**1. Course Information**

**Course Description:** This course provides an in-depth look at the structures, reactivity, and synthesis of important functional groups in organic chemistry, starting with the reactions of alkenes. It emphasizes resonance, reaction mechanisms (arrow pushing), conformational analysis, stereochemistry, and organic synthesis.

**Course Prerequisite:** Chemistry 1301 and Chemistry 1302 with a minimum mark of 60% in each or Chemistry 1301 and Integrated Science 1001 with a minimum mark of 60% in each.

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for this course or written special permission from the Department of Chemistry to enroll in it, you may be removed and withdrawn from this course in accordance with university policy. This may be done after the add/drop deadline of the academic term, and the course will be marked as withdrawn (WDN) on your academic record.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.

**2. Instructor Information**

**Instructor:**

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]. I am also available by appointment.

**Email policy:** Students should email from their @uwo.ca email account. Please include the course code in your email subject and allow 24 hours for a response on **weekdays**; generally, I will not respond on weekends.

Official announcements will be posted on the CHEM 2273 course page on OWL Brightspace. It is **ABSOLUTELY YOUR RESPONSIBILITY to check these postings regularly for important announcements.**

**A note on privacy and appropriate use of course materials:** Lectures will be recorded, and should the student require access, they will be made available. The quality of these recordings cannot be guaranteed. These recordings should be considered private and for the use of students registered in the course **only**. They may not be shared or reposted in any way. Additionally, students may not make their own recordings, either for personal use or distribution. Students with accessibility requirements should contact the course instructor to make appropriate arrangements.

**3. Course Syllabus & Schedule**

**Lectures:**

[REDACTED]

**Labs:**

[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]

**Schedule:**

Chapter	Topic	Lecture Hrs.
1-4	Molecular Structure and Bonding	3
	Polar Covalent Bonds; Acids and Bases	3
	Organic Compounds: Alkanes and Their Stereochemistry	3
	Organic Compounds: Cycloalkanes and Their Stereochemistry	3
<b>Term Test 1: Introduction to Organic Molecules (Oct. 3<sup>rd</sup>, 2025)</b>		
5, 6 & 8	Stereochemistry at Tetrahedral Centres	3
	An Overview of Organic Reactions	3
	Alkenes: Structure and Reactivity	3
	Alkenes: Reactions and Synthesis	3
<b>Term Test 2: Stereochemistry &amp; Introduction to Organic Synthesis (Oct. 31<sup>st</sup>, 2025)</b>		
7 & 17	Organohalides	3
	Alkyl Halides: Nucleophilic Substitutions and Eliminations	6
	Benzene and Aromaticity	3
<b>Final Exam: Cumulative including Labs (Focus on Organic Reactions)</b>		

**Student Learning Outcomes:**

1. Identify and describe the fundamental principles of structure and bonding in organic compounds.
2. Conduct conformational analysis and understand the arrangement of molecules in space.
3. Understand various organic reactions and reaction mechanisms and how they can be used to construct compounds of different compositions.
4. Be prepared for continuing study in chemistry; however, if this is to be your only course in organic chemistry, you will gain some understanding of its importance in other scientific areas.

**4. Course Materials**

**Textbook:** Klein & Starkey, *Organic Chemistry: 5<sup>th</sup> Edn.* Wiley. (\$139.00).  
The purchase of a molecular model kit is also strongly recommended. (\$34.50).

**Lab Manual:** CHEM 2273A Organic Chemistry I Laboratory Manual, Fall 2025. (\$49.00).  
Hayden-McNeil Organic Chemistry Laboratory Notebook. (\$16.05).

Brief lecture notes will be available at the CHEM 2273 course room on OWL Brightspace ahead of each class. *These notes do not represent all the concepts and problems that will be discussed in lecture.* Therefore, it is important to attend all CHEM 2273 classes. **Be prepared to make notes in lecture on the material discussed as this is a key component of active learning.** It is here fundamental course content will be presented and explained.

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.

## 5. Methods of Evaluation

<b>Evaluation/Grading Scheme:</b>	Quizzes (10)	10 %	(the best 8 marks will be counted)
	Term Tests (2)	30 %	(10 or 20 % each) <sup>&amp;</sup>
	Labs (6)	20 % <sup>#</sup>	
	Final Exam	40 %	
	Introduction Activity	1 %	(bonus mark, to be submitted on OWL)

<sup>&</sup> *The higher term test mark will be weighted 20%, the lower will be weighted 10%.*

<sup>#</sup> *A passing mark of 50 % or higher for the laboratory component is a requirement towards successful course completion. Additionally, at least four of six laboratory sections must be attended whether excused or not (see section “Evaluation Scheme for Missed Assessments” for more information) Reports submitted after the 48-hour no-late-penalty period (see section “Deadline with a No-Late-Penalty Period” for more information) will be subject to a 10% per day penalty (maximum 3 days).*

<b>Test Schedule:</b>	Quizzes	
	Term Test 1	
	Term Test 2	
	Final Exam	To be scheduled during the examination period, Dec. 11 <sup>th</sup> -22 <sup>nd</sup> . The actual date of the exam will be set by the registrar’s office and could occur on the last date mentioned.

The quizzes will cover material from the previous weeks’ worth of lectures. The two term tests will not be cumulative; however, the final exam will cover the entirety of course work, including laboratory work.

**Generative AI Tools (e.g., ChatGPT):** In this class, I consider AI to be a tool that can assist your learning. **For every lab report, an AI statement is required.** In this statement, students must provide information on the program employed, the prompts used, how information gained was used to complete the assignment as well as your assessment of the tool’s overall value. If you did not use AI, just say so. Using AI tools to generate, copy, or paraphrase content without proper citation is a violation of academic integrity.

### General information about missed coursework:

Students must familiarize themselves with the [University Policy on Academic Consideration – Undergraduate Students in First Entry Programs](#), posted on the Academic Calendar. 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](#).

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 (Defined by policy)
- Practical laboratory (Defined by policy)

When a student *mistakenly* submits their one allowed Academic Consideration request **without supporting documentation** for the assessments listed above or those in the **Coursework with Assessment Flexibility** section below, the request cannot be recalled and reapplied. This privilege is forfeited.

### **Evaluation Scheme for Missed Assessments:**

No make-up quizzes or term tests will be offered. For quizzes, see the rules for flexible completion below. For term tests, in the event of a documented absence that meets the university's accommodation policies, the weight of the missed term test (first missed test, 10%; second, 20%) will be transferred to the final exam. Undocumented absences will result in a grade of zero for the missed assessment.

Attending laboratory sessions is critical and you are expected to complete all experiments. However, situations may arise that require you to miss a lab session due to illness or other unexpected circumstances. In such cases, a request for Academic Consideration must be made. A minimum number of four (4) laboratory experiments must be completed in-person and submitted for grading. Students who fail to meet this requirement would have to apply to the Dean's Office to receive a grade of INC and complete the missed labs the next time the course is offered.

When a student misses the Final Exam and their Academic Consideration has been granted, they will be allowed to write the Special Examination (the name given by the University to a makeup Final Exam). See the Academic Calendar for details (under [Special Examinations](#)), especially for those who miss multiple final exams within one examination period.

### **Essential Learning Requirements:**

Even when Academic Considerations are granted for missed coursework, the following are deemed essential to earn a passing grade: (1) A passing mark of 50 % or higher for the laboratory component is a requirement towards the successful course completion; and (2) In person participation for four out of six laboratory sections regardless of Academic Consideration.

### **Coursework with Assessment Flexibility:**

#### **i. Flexible Completion**

**Quizzes.** This course has 10 quizzes, and the 8 quizzes with the highest marks are counted towards your final grade. Should extenuating circumstances arise, students do not need to request Academic Consideration for the first 2 missed quizzes. Academic consideration requests will be denied for the first 2 missed quizzes. Academic Consideration requests may be granted when students miss more than 2 quizzes, and these additional (3<sup>rd</sup>, 4<sup>th</sup>...) missed quizzes will be reweighted to the final exam.

## ii. Deadline with a No-Late-Penalty Period

**Lab reports.** Students are expected to submit each of the lab reports by the deadline listed. Should extenuating circumstances arise, students do not need to request Academic Consideration, and they are permitted to submit their assignment up to 48 hours past the deadline without a late penalty. Should students submit their assessment beyond 48 hours past the deadline, a late penalty of 10% per day will be applied. Academic Consideration requests may be granted only for extenuating circumstances that started before the deadline and lasted longer than the No-Late-Penalty Period (48 hours).

## How to Request a Re-Grade

If you feel very strongly that any test or assignment question was graded unfairly, please email the course instructor from your @uwo.ca email address with a subject line: “CHEM 2273 Re-Grade Request” and include a clear explanation of your concern as well as a scan of your evaluation. You must do so within 24 hours of your evaluation being returned to you with feedback. Only in-person assessments that were written using pen may be re-graded. Re-grading may result in an increase or decrease. Re-grades are final.

## 6. Additional Statements

### 6.1 Religious Accommodation

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 course instructor and/or the Academic Advising office of their Faculty of Registration. This notice should be made as early as possible, but not later than two weeks prior to the writing of 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.

### 6.2 Academic Accommodation Policies

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 [here](#).

### 6.3 General Academic Policies

The website for Registrar Services can be accessed [here](#).

**Use of @uwo.ca email:** In [accordance with policy](#), the centrally administered e-mail account provided to students will be considered the individual’s official university email address. It is the responsibility of the account holder to ensure that emails received from the University at their official university address are attended to in a timely manner.

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

Links for [the Policy on Request for Relief from Academic Decision](#) and [Procedures on Request for Relief from Academic Decision \(Undergraduate\)](#).

## 6.4 Scholastic Offences

Links for [the Policy on Scholastic Offences](#) and [Procedures on Scholastic Offences \(Undergraduate\)](#).

### 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. Using such tools for content generation, code writing, problem solving, translation, or summarization—when not explicitly allowed—will be treated as a **scholastic offence**.

If the use of generative AI is permitted for a particular assessment, the conditions of use will be specified by the instructor in advance. If no such permission is granted, students must assume that use is prohibited. It is your responsibility to seek clarification before using any AI tools in academic work.

## 6.5 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.

Students who are in emotional/mental distress should refer to [Mental Health@Western](#) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence (GBSV) and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced GBSV (either recently or in the past), you will find information about support services for survivors, including emergency contacts [here](#). To connect with a case manager or set up an appointment, please contact [support@uwo.ca](mailto:support@uwo.ca).

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. If you have any questions regarding accommodations, you may also wish to [contact Accessible Education](#).

Learning-skills counsellors at [Learning Development and Success](#) 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.

Additional student-run support services are offered by the [University Student Council \(USC\)](#).