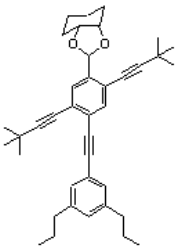
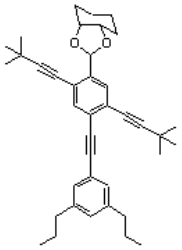


Organic Chemistry II (CHMB42) – Winter 2024
University of Toronto Scarborough



Welcome to part II of Organic Chemistry! This topic can be very daunting and will require some hard work from you. However, I hope that you can learn something valuable in this course—whether it's from the labs, the techniques, or the content—tat helps you see the exciting connections of organic chemistry in life. Please take a few minutes to read through this document. It contains important information which will help guide your success.

Instructor (Labs and Lectures):

Tsuimy Shao
Email: tsuimy.shao@mail.utoronto.ca

Office Hours:

Wednesdays 10:30 AM–12:00 PM on Zoom (See Quercus for Link)
Thursdays 10:30 AM–12:00 PM in TBD
Office hours are a chance to meet with me, Tsuimy, and ask any questions you may have about the course material – or about chemistry in general!

Lectures Schedule, LEC01 Section:

Mondays	10:10 AM–11:00 AM	SY110
Thursdays	9:10 AM–10:00 AM	AC223
Fridays	2:10 PM–3:00 PM	AC223

Lectures Schedule, LEC02 Section:

Recordings of the live LEC01 sections will be posted for viewing through Quercus. Course videos and materials belong to the instructor and the University and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor.

Course Requirements:

Prerequisites: [CHMA11H3 or CHMA12H3] and CHMB41H3
Exclusions: CHM243H5, CHM247H1, CHM249H1

Textbook:

We will be using Top Hat to access the digital textbook: *Organic Chemistry: Mechanistic Patterns*, 2nd Edition by William Ogilvie et al. You will find practice questions in addition to chapter resources. If you already have a Top Hat account from another course, go to https://app.tophat.com/e/550942 to be taken directly to this course's digital textbook. If you are new to Top Hat, go to https://app.tophat.com/register/student; search for this course's digital textbook with the join code ***550942*** and follow the prompts.

Email Policy:

Please do not send questions about course content to Tsuimy by email; these should be asked during office hours OR directed to the course discussion platform, Piazza (see below). Email should be reserved for times when personal information needs to be shared (***your*** circumstances, ***your*** grades, etc.). Please send these emails using a *utoronto.ca* email address to avoid having your message filtered out as spam. Please include the course code "CHMB42" in the subject line along with a concise statement on the content of the email.

Discussion Board:

This course will be using Piazza for class discussion. The Piazza system is designed to get you help fast and efficiently from classmates, the TAs, and myself. Rather than emailing questions to the teaching team, I encourage you to post your questions on Piazza. You can find the class signup link in the main Quercus menu.

Tutorials:

This course has weekly, one-hour tutorials which begin the week of January 15th. Students will work in small groups to complete problem sets. Some weeks, these problem sets will be counted towards your mark while in others they will be for practice only—instead you will have a short quiz in the last 10 minutes of the tutorial. **Your tutorial mark is worth 8% of your final grade.** *The lowest three grades out of your 11 tutorials will be dropped*. See Quercus for a detailed schedule showing what content you are responsible for each tutorial.

Labs:

Students are required to attend a four-hour lab every other week. There are five lab experiments in total, worth a combined **25% of your final course grade**. The laboratory component of CHMB42 is compulsory and ***you must also pass the lab component to pass the course.*** Your schedule is determined by your practical number. Odd numbered practicals (e.g. PRA001, PRA003) will start the week of January 15th; even numbered practicals (e.g. PRA002, PRA004) will start the week of January 22nd.

Required Items for the Lab:

Students must purchase a lab manual from the Chemistry Student Society before their first lab. Manuals from past semesters may not be used. More information will be announced on Quercus during the beginning of the semester. In addition to the lab manual, students will also need a hard-cover notebook, a lab coat and safety goggles. Details on these items, as well as important instructions on preparing for your first lab period can be found in the introductory pages of your lab manual. Make sure you read them before your first lab!

Online WHMIS Videos and Safety Quiz:

Before arriving to your first lab period, you are required to watch a series of WHMIS laboratory safety videos and complete an online safety quiz. These are found on your Quercus dashboard, listed as: UTSC 20241 Chemistry Lab Safety WHMIS training. Follow the instructions presented there. You must achieve a score of 80% or better on the quiz to be allowed to enter the lab. Your TAs will be checking your score on the quiz when you arrive on your first lab day; Please be prepared to show them your quiz resu lts either on your phone or as a printed hard copy. *NOTE: The date on the quiz must be from this term (January 2024); even if you've taken the quiz in a previous semester, it must be repeated for the current semester.*

Formal Lab Report:

Students will write and submit a formal lab report on one of their lab experiments. The report is worth **5% of the final course grade**. Details on the report (expectations, due dates) will be provided on Quercus.

Term Tests:

There will be a 2-hour midterm written outside of class time. The exact date, time, location, and material to be tested will be announced as soon as the tests are scheduled by the registrar's office. This is worth **20% of your final grade**.

Final Examination:

There will be a 3-hour, cumulative exam written during the end-of-semester exam period. The exam will cover both lecture and lab-related materials. The exact date, time, and location will be announced as soon as they are available.

Course Engagement Grade:

To help keep everyone motivated in the course, there is a 2% grade for course engagement. There are 5 ways of earning credit towards this 2%:

- Attend at least 75% of the lectures
- Regularly post and/or answer questions on Piazza (average 2 posts/replies per week)
- Complete at least 75% of the assigned TopHat textbook questions
- Complete at least 75% of the weekly post-lecture quizzes with an average grade of at least 75%
- Create an infographic—more details to be posted on Quercus regarding the creative assignment

Each of the first four above activities is worth 1%; pick any two to earn the full 2% or complete the creative assignment for the potential full 2%.

Weekly Post-Lecture Quizzes (Optional):

At the end of each week, there will be a short online quiz based on the previous weeks' lecture material. The questions are intended to test your **basic** understanding of the lecture material before you proceed to the more in-depth problem solving needed for the textbook problems, tutorial problems, and exam questions. Unless otherwise announced, review quizzes will close on **Sundays at 11:59 PM**. Note that these quizzes are not for credit, but their completion can be used towards the course engagement grade (see above).

Method of Evaluation:

Graded Work	**Value**
Laboratory	25%
Formal Lab Report	5%
Midterm	20%
Tutorials	8%
Course engagement	2%
Final exam	40%
TOTAL	**100%**

Note: To pass the course, you must meet **ALL** the following criteria:

1) Earn a passing grade in the course overall (> 50%)
2) Complete at least 3 of the 5 lab experiments
3) Pass the lab portion of the course
4) Pass either the midterm OR pass the final exam

If you earn a passing grade in the course overall, but fail to meet one or more of the above criteria, your final grade will be lowered to 49%.

Week of	Lecture	Tutorial	Labs
Jan. 8th	Ch. 9: Conjugation & Aromaticity	----	----
Jan. 15th	Ch. 10: Electrophilic Aromatic Substitution	Ch. 9	Exp. 1 (odd # PRAs)
Jan. 22nd	Ch.10 cont.	Ch. 10 (part 1)	Exp. 1 (even # PRAs)
Jan. 29th	Ch. 12: Formation of Pi Bonds (eliminations, oxidations)	Ch. 10 (part 2)	Exp. 2 (odd # PRAs)
Feb. 5th	Ch. 13: NMR Spectroscopy	Ch. 12	Exp. 2 (even # PRAs)
Feb. 12th	Ch. 13 Cont.	Ch. 13 (part 1)	Exp. 3 (odd # PRAs)
--- Reading Week ---			
Feb. 26th	Ch. 14: MS and IR Spectroscopy	Ch. 13 (part 2)	Exp. 3 (even # PRAs)
Mar. 4th	Ch. 15: Carboxylic acid Derivatives and their Reactions	Ch. 14	Exp. 4 (odd # PRAs)
Mar. 11th	Chapter 15 Cont.	Ch. 15 (part 1)	Exp. 4 (even # PRAs)
Mar. 18th	Ch. 16: Acetals and Related Compounds	Ch. 15 (part 2)	Exp. 5 (odd # PRAs)
Mar. 25th	Ch. 17: Carbonyl-Based Nucleophiles	Ch. 16	----
Apr. 1st*	Ch. 17 Cont.	Ch. 17 (part 1)	Exp. 5 (even # PRAs)
Apr. 8th**	Ch. 18: α,β-Unsaturated Electrophiles	----	----

**No Friday lecture; **Monday Lecture only*

Policy on Late Submissions:

Late submissions of assessments and assignments will result in a 10% deduction (of the total worth of the assignment) per day, including the weekend. This deduction begins the moment the deadline has passed. For example, a report (out of 50) due at 11:59 PM, January 1st, will have a 5-mark deduction (10% of 50) if submitted between January 2nd 12:00 AM to 11:59 PM. If submitted on January 3rd between 12:00 AM to 11:59 PM, it will be a 10-mark deduction, so on and so forth. Assessments more than 7 days late will automatically receive a grade of 0 unless prior accommodations (such as AccessAbility) or exceptions (for legitimate reasons with appropriate documentation) were granted.

Policy on Missed Tutorials:

If a student misses a tutorial for any reason, the missing grade will count as one of the three lowest grades that is automatically dropped from the final tutorial grade. These **missed tutorials do NOT need to be brought to the attention of Tsuimy.** If a student has an ongoing conflict with their tutorial section causing them to miss more than 3 tutorials, they should reach out to Tsuimy directly to discuss possible accommodations.

Policy on Missed Labs and Term Tests:

If you need to miss a laboratory period or term test for any legitimate reason, the following steps are to be taken:

1. Self-declare your absence on ACORN.
2. Take a screen capture of your declared absence.
3. Contact Tsuimy by email (tsuimy.shao@mail.utoronto.ca)with the details of your absence, including the screen capture of your self-declared absence. This should be done as soon as possible. If you have missed a lab, be sure to include your PRA number.

Once your absence has been validated, accommodations will be made for the missing grades. For missed term tests, students will be given the choice of either writing a make-up test OR moving the weight of the missed test to the final exam. For missed labs, the missing lab grades will be redistributed over the remaining lab grades unless other accommodations have been discussed.

If no explanation for your absence is provided, a grade of zero will be assigned.

Ancillary Fees:

The Department of Physical and Environmental Sciences at UTSC provides state-of-the-art education in chemistry. Chemistry being an experimental science makes learning in a laboratory setting critical. In order to provide the latest technology to enhance the student learning experience, UTSC will be charging ancillary fees for all chemistry courses that have a laboratory component. These fees are used to recover the cost of materials and services used during the lab and to maintain and upgrade the equipment used by students. For more information regarding ancillary fees, students are encouraged to visit the following website: *https://planningandbudget.utoronto.ca/tuition-ancilliary-fees/ancillary-fees/*

Plagiarism Detection Tool:

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq).

Academic Integrity:

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (http://www.governingcouncil. utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment. On tests and exams cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test,

misrepresenting your identity, or falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

Accessibility:

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Access*Ability* Services Office as soon as possible. I will work with you and Access*Ability* Services to help you can achieve your learning goals in this course. Enquiries are confidential. The UTSC Access*Ability* Services staff (located in AA142) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca. Please note that their services are in high demand; you are encouraged to approach them early in the semester to ensure that any accommodation you may need will be in place in time.

Equity, Diversity, and Inclusion:

The University of Toronto is committed to equity, human rights, and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.