

CHM 136H: ORGANIC CHEMISTRY I

Summer 2024 Course Syllabus

I TEACHING TEAM

Please direct ALL course inquiries to this course email address: chm136h@utoronto.ca



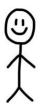
COURSE INSTRUCTOR & COORDINATOR

Professor Kylie Luska (he/him) **Office:** LM 219



LABORATORY COORINDATOR

Dr. M. Morales (he/him)



COURSE ADMINISTRATOR

TBD



COMPUTATIONAL LABORATORY INSTRUCTOR

Dr. M. Staikova (she/her)

COMPONENT COURSE SUMMARY

LECTURES Tuesday, Wednesday and Thursday (weekly starting May 7th)

9:30 AM - 12:00 PM

HS 610

TUTORIALS Tuesday and Thursday (weekly starting May 9th)

1:00 - 2:00 PM

LABORATORIES Tuesday, Wednesday or Thursday (weekly starting May 14th)

2:00 - 5:00 PM

LM 217

STUDENT HOURS Course Instructor

Tuesday, Wednesday and **Thursday** after class (~12:00 – 1:00 PM)

→ Tuesday and Wednesday in-person in LM 108

→ Thursday virtual via Zoom

(https://utoronto.zoom.us/j/89582954769, Passcode: chm136h)

Laboratory Coordinator

Tuesday and Thursday 3:00 - 4:00 PM

→ In-person in LM 217

II COURSE OVERVIEW

Welcome to CHM 136H – Introductory Organic Chemistry I! CHM 136H provides an introduction to the fundamental principles of structure, bonding and reactivity of organic molecules. It is designed for students who intend to follow a science program, primarily in the Life or Health Sciences. CHM135H is a prerequisite for this course. We believe that CHM 136H, along with CHM 135H, will prepare you well for other chemistry and life-science courses in later years. CHM 135H and CHM 136H are the recommended courses for those applying for entry into professional programs. CHM 135H and CHM 136H are also acceptable for admission to any of the undergraduate programs offered by the Department of Chemistry.

STUDENT LEARNING OUTCOMES

By the end of CHM 136H, students should be able to:

- understand the relationship between organic chemistry and the living world
- understand the relationship between molecular shape and current bonding models in organic chemistry;
- recognize the central role of molecular structure, including stereochemistry, in chemical properties;
- understand key analytical tools used by organic chemists (IR, NMR)
- implement principles of "curved arrow notation" as applied to the description of organic reaction mechanisms:
- understand the reactivity of carbonyl and alkene functional groups;
- identify the principles of lab safety;
- understand the relationships between molecules and how they affect solubility;
- learn a variety of purification techniques (e.g., recrystallization, extraction, reflux/distillation);
- identify unknown compounds using melting point analysis;
- obtain and use computational chemistry calculations to enhance the understanding of conformational analysis.

TEXTBOOK and OTHER RESOURCES

The course textbook is "Organic Chemistry: Mechanistic Patterns", 2nd edition by Ogilvie, Ackroyd, Browning, Deslongchamps, Lee, and Sauer.

This textbook is only available as an e-textbook through Top Hat (www.tophat.com). You will be able read content and submit answers to practice questions using Apple or Android smartphones, tablets, or laptops. Your responses to problems will not be graded, despite contents being in Homework Mode. They are simply set up that way so you can complete practice questions before seeing the ideal answers. Once the semester is over, you will have access to the entirety of the textbook. For more information, please refer to Top Hat's My Library article.

For instructions on how to create a Top Hat account, purchase the e-textbook, and access materials, please refer to the invitation sent to your University of Toronto email address or consult <u>Top Hat's Getting Started Guide</u>.

If you already have a Top Hat account, go to app.tophat.com/e/005288 to be taken directly to our course. If you are new to Top Hat, follow the link in the email invitation you received or ...

- Go to https://app.tophat.com/register/student
- Click "Search by School" and input University of Toronto
- Search for our course with the following join code: 005288

Should you require assistance with Top Hat at any time please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491. Specific user information may be required by their technical support team when troubleshooting issues.

The purchase of a **molecular model kit is strongly recommended**. These are available for purchase from ChemClub and other vendors online.

The course website is found on Quercus. There is ONE Quercus tile that contains information pertaining to ALL course components (lecture, laboratory, and tutorial).

III HOW THE COURSE IS ORGANIZED

Each week, you will attend three (2.5 hour) classes AND two (1 hour) tutorials to support your learning. **In the laboratory, you will complete five (5) experiments** over the course of the semester. CHM 136H will introduce the following fundamental organic chemistry concepts:

Week	Lecture Dates	Main Concepts	Textbook Sections	Tutorials	Labs		
1	May 7	Introduction to organic	Ch. 1.2-1.7, 1.9	-			
	May 8	compounds	Ch. 2.2-2.5	-	_		
	May 9		Ch. 5.5-5.7	TUT 1			
2	May 14	Infrared (IR) and nuclear	Ch. 13.2, 13.4.1, 13.4.2,	TUT 2			
	May 15	magnetic resonance (NMR)	13.4.3.1	- EXP 1	EVD 1		
		spectroscopy	Ch. 14.6-14.7	_	EAP 1		
	May 16	Conformations	Ch. 3.2-3.7	TUT 3			
3	May 21	Stereochemistry	Ch. 4.2-4.10	TUT 4	EXP 2		
	May 22	Mechanisms	Ch. 5.2-5.4, 5.10-5.11	_			
	May 23	Term Test 1 : 10:30 AM – 12:00 PM (during class)		TUT 5			
4	May 28	Acid and base chemistry	Ch. 6.2-6.9	TUT 6			
	May 29	π-Bonds as electrophiles:	Ch. 7.2 (excl. 7.2.3), 7.3, 7.5	_	EXP 3		
	May 30	Ketones and aldehydes	(excl. 7.5.4 + 7.5.5), 7.9-7.11	TUT 7			
5	June 4	π-Bonds as electrophiles:	Ch. 7.8	TUT 8			
	June 5	Carboxylic acid derivatives	Ch. 15.2-15.4 (excl. 15.3.1 +	– EXP	EVD 1		
			15.3.4), 15.6-15.8		LAF 4		
	June 6	Term Test 2 : 10:30 AM – 12	2:00 PM (during class)	TUT 9			
6	June 11	π-Bonds as nucleophiles	Ch. 8.2, 8.3, 8.4 (excl. 8.4.2),	TUT 10			
	June 12		8.5, 8.6, 8.7.2, 8.7.3, 8.7.4	_	EXP 5		
	June 13			TUT 11			
	Final Exam: TBA (June 19-24)						

**Please note that this schedule and the textbook sections are approximate. There may be material that is covered in class that is not discussed in the textbook, while some topics covered in the textbook may not be discussed in class. Only materials covered in class and tutorial will be testable. The textbook readings and assigned textbook questions are provided to support your learning.

IMPORTANT SUMMER 2024 SESSIONAL DATES:

<u>Classes begin in F and Y courses</u>: Monday May 6th <u>Last day to drop F courses</u>: Monday June 3rd <u>Classes end in F and Y courses</u>: Monday June 17th

Final exams in F courses: June 19-24th

CLASS

Lectures are held on **Tuesday**, **Wednesday** and **Thursday** at **9:30 AM** – **12:00 PM** in **HS 610** starting **Tuesday May 7**th. Lectures are designed to be attended in-person as in you will be an active participant in your learning through problem-solving, asking and answering questions and discussing with your peers. **Partial lecture notes will be provided on Quercus ahead of each class.** As you attend the lectures, you should annotate these incomplete notes with your own notes and explanations. Some of the problems will be done as a class and do not appear in the notes. Be prepared to make notes on the material discussed in class as this is a key component of active learning.

Recordings of lectures will be provided on Quercus. These recordings are intended to help students with unexpected absences from their studies. The recordings are only a partial substitute for the learning that occurs in class, so it is in your best interest to make every effort to attend class. We encourage students with unexpected absences to view these recordings as soon as possible to keep up with the course material. We discourage students from binge watching these recordings as a method of study as time and practice are essential components to synthesize understanding of organic chemistry.

Note - technical errors can occur during the recording of lectures, and it will not be the responsibility of the instructional team to provide a replacement video.

Any questions you have about lecture content can be asked during lecture, during student hours, or on the discussion board (see below). Student hours (schedule found above) are designed to give you the opportunity to informally ask questions about the course content with your CHM 136H instructors.

TUTORIALS

Tutorials are held on **Tuesday** and **Thursday** at **1:00 – 2:00 PM** starting on **Thursday May 9th**. Tutorial groups have been created based on last name as detailed in the following table. Be sure to attend the tutorial group that you have been assigned for the entirety of the term:

Tutorial Section	Student Last Name	Room
TUT0101A	A-E	UC 161
TUT0101 B	F-K	UC 163
TUT0101 C	L-P	UC 179
TUT0101 D	Q-S	RW 143
TUT0101 E	T-Z	SS 2105

The objectives of the CHM 136H tutorial are:

- (i) to re-visit the course content seen in class
- (ii) to solve organic chemistry problems in smaller groups and with your teaching assistant
- (iii) to give you an opportunity to ask questions in a smaller group environment, to meet your peers and to build a community within a large course

In Quercus, you will find the following information:

- 1. A schedule of weekly assigned textbook problems
- 2. Additional problems to do prior to each tutorial (these will be discussed during the tutorial)
- 3. Links to TeamUp! group quizzes

The TeamUp! group quizzes will be completed during tutorial, in which ONLY your best 8 of 11 TeamUp! scores will count towards your final grade. There will be no make-up TeamUp! quizzes. Dropping the lowest three scores will account for any unexpected absences.

Before coming to your tutorial each week, we encourage students to complete the assigned textbook and instructor-provided questions! Active student participation in problem-solving is linked to success in learning organic chemistry. During these tutorial sessions, your teaching assistant will discuss any questions that you may have concerning the assigned exercises and assist you in understanding the important course concepts.

Organic chemistry is an area of science that relies on problem-solving. **Practice** in problem-solving is necessary to master the material and be successful on the course assessments. The practice you will get in your tutorials (as well as the assigned textbook problems) will provide you an important opportunity for self-assessment and help you in keeping up with the course material.

LABORATORIES

It is essential that you have enrolled in a practical section through ACORN/ROSI. If you have not yet enrolled in a PRA section, do so immediately. If the window on ACORN has closed, please send an email to chm136h@utoronto.ca with the subject line "Practical enrollment".

The purpose of the CHM 136 laboratory work is to introduce you to some of the basic techniques of organic chemistry. The laboratories in CHM 136H include four "wet" organic experiments and one computational experiment. On your CHM136H Quercus tile, you will find the schedule for the laboratory experiments this term. All of the materials for each lab (including quizzes, online laboratory sessions for the computer lab only, and laboratory report submissions) are located in a different module on Quercus. Each lab module will become available as the course progresses. You will be required to purchase a lab manual from Chem Club (located in LM 203).

The policy for late submissions, reweighting due to missed pieces of academic work, the process for requesting re-grading of course work are all provided on Quercus under "Laboratory Information".

Each "wet" experiment begins with reading the assigned materials, watching the relevant videos, answering pre-laboratory questions and completing an in-lab quiz. This must be completed **before** your in-person laboratory session with your teaching assistant (TA) and practical group. Each "wet" laboratory finishes with the submission of a written report. For questions about the "wet" laboratories, please send an email to chm136h@utoronto.ca with the subject line "Wet Lab" **and** include the

experiment title. Please direct your email to Dr. Morales and always include your **full name, student number, PRA section** and **demo group.**

The computational experiment will be conducted virtually. Please note that the logistics for this experiment differ from the other laboratory experiments. Consult the schedule specific for the computational experiment. You will find it in the Computational Lab Module. The time interval when you will perform this experiment and the virtual session date depend on your Demo Group number.

When the computational lab module becomes available on the CHM 136H Quercus page, you will work independently on the lab tasks, performing computations of the substrate properties on WebMO, the Chemistry Department computer server. Each student will use their own user ID and password (details in the Computational Experiment module) and will have their own WebMO directory where the computational jobs will be executed and collected. Students will have about 10 days to finish as many of the required calculations as possible. During this period of time, you can do them at any time. At the end of the period, you will have a one-hour virtual meeting (mandatory) with a teaching assistant to discuss the laboratory topic, provide help with problems you might have had with the computations, and discuss details of the computational lab report. The lab report for the computational lab is due one week after the virtual meeting with your TA.

The best way to answer your questions and concerns about the computational lab is to **attend one of the computational lab student hours**. If you are unable to attend these student hours, please send an email to chm136h@utoronto.ca with the subject line "Computation Lab". With every communication regarding the computational lab, please direct it to Dr. Staikova through the chm136h@utoronto.ca email address and always include your **full name, student number, PRA section and demo group.** Another source where you can get assistance with your computational experiment is the discussion board.

Information Regarding Use of Artificial Intelligence Tools in the Writing of Laboratory Reports:

Generative Artificial Intelligence (AI) technology is evolving quickly, and it is necessary to specifically address this within the context of CHM 136H laboratory reports. AI tools such as ChatGPT (GPT stands for Generative Pre-trained Transformer) are large language models that have been trained on a limited dataset to generated content based on prompts and the data it has been trained on. It is important to recognize there are major limitations to these tools, particularly in more specialized subjects such as chemistry. Currently, ChatGPT and many similar models are only trained on freely available data and will not include information that is only accessible through payment, which includes much of the scholarly literature, textbooks, etc. (There is a lot of reliable information on the internet, but there is also a lot of junk, and ChatGPT does not know how to tell the difference: it has no concept whatsoever of scientific accuracy). In addition, ChatGPT does not cite its sources: when asked to include citations, it will routinely reference papers that do not exist. By using ChatGPT to generate text, you run the risk of accidentally plagiarizing one of the many sources that are included as part of its training data.

By completing the laboratory reports in CHM 136H, students will begin to develop effective scientific communication skills and use scientific literature to understand and evaluate experimental procedures and results. The practice and repetition of writing on your own has been shown in numerous scientific reports to lead to deeper and longer lasting learning. *In this course, the use of ChatGPT and/or other generative AI tools is permitted within the limitations of reviewing your own written work for additional suggestions of grammar, punctuation, etc.* In this manner, the tool is educational and can help you develop

better writing skills when used critically and for self-analysis. However, it is both ill-advised and prohibited to solely use these tools to attempt to write or analyze components of pre-laboratory quizzes and/or laboratory reports. As mentioned previously, the capabilities of the systems are limited, and you will not develop the scientific communications skills needed for future studies or careers.

In summary, it is well-established that these tools will misuse and fabricate information and referencing, which will be noticeable by your TAs and laboratory instructors and will leave you susceptible to academic discipline violations (see the "Academic Integrity" section below).

DISCUSSION BOARD

We will be using Ed, a free platform that facilitates online Q&A discussions. **Information on how to join Ed can be found on the Home Page of the Quercus CHM 136H course tile.** We highly encourage you to ask your content questions on Ed where all students can benefit and collaborate on responses to these questions. A member of the teaching team will occasionally monitor the discussion board; however, it is considered a **student-driven learning tool where students are expected to help one another!**

Note – sharing solutions to report sheets, quizzes, and TeamUp! questions (through Ed or through other means) is in violation of **University of Toronto's Code of Behaviour on Academic Matters** (see Academic Integrity section of syllabus) and will be treated accordingly.

NEW CURRICULUM

Beginning in the Winter 2024 academic term, the organic chemistry curriculum taught in CHM 136H is significantly different compared to previous years. The teaching team in the Department of Chemistry believe the new curriculum will provide students with a more effective and engaging learning experience. As a result, significant curricular changes will also be made in our second-year organic chemistry courses: CHM 247H and CHM 249H (starting in Winter 2025). If you intend on enrolling in CHM247H or CHM249H, please do so beginning in Winter 2025. **Do not enroll in CHM247H during Summer 2024 as this course will not compliment the knowledge obtained in CHM136H this semester. Do not enroll in CHM 247H during Summer 2024 as this course will not compliment the knowledge obtained in CHM 136H this semester. Please enroll in CHM 247H or CHM 249H in Winter 2025 or later.**

Note – this curriculum change means that CHM 136H past tests and final examinations will no longer align with the material taught this semester. The instructors will provide practice materials to supplement student learning and preparation for assessments.

IV EVALUATION/GRADING SCHEME

Tutorial Group Quizzes (Team Up!): 5% (best 8 of 11 count toward your mark)

Practical (Labs): 25%

Term Tests: 35% (lower test: 12.5%, higher test: 22.5%)

Final Exam: 35%

Examination Details:

Tests and exams in CHM 136H will include a mix of multiple-choice and short answer questions and will take place on the following dates:

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Term Test 1 – Thursday May 23<sup>rd</sup> 10:30 AM – 12:00 PM (during class) Term Test 2 – Thursday June 6<sup>th</sup> 10:30 AM – 12:00 PM (during class)
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Final Exam – TBA (date of the final exam set by the Faculty of Arts & Science between June 19-24)

Students who miss a test must complete the Acorn Absence Declaration AND email chm136h@utoronto.ca with a screenshot of the Acorn Absence Declaration as soon as possible (ideally less than 2 days) and within one week of the absence to get consideration for a missed test.

Please note that there are no make-up tests.

Consideration for one missed test will result in the other test accounting for 22.5% of the final mark and the final exam accounting for 47.5% of the final mark. For students missing both term tests the mark for the missing tests will be replaced by the final exam.

V COURSE POLICIES

Each member of this course is expected to maintain a:

- professional and respectful attitude during all course activities, including classes, laboratories, tutorials, and other online activities.
- personal calendar/schedule/organizer to ensure that all course activities are completed, and due dates are met.
- collection of notes recorded independently based on concepts covered in course activities (students registered with Accessibility Services requiring a class note-taker will have access to this accommodation)
- familiarity with the university policy on Academic Integrity

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. The CHM 136H Teaching team will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and we wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment, and hate speech will not be tolerated. If you have any questions, comments, or concerns, we encourage you to reach out to the staff in our Equity Offices.

E-MAIL and GETTING HELP

- For any course-related communication, please only use chm136h@utoronto.ca. Do not send messages through Quercus.
- For course content questions, please ask during your tutorial, during the weekly student hours or
 post your question on the course discussion board. Please keep in mind that email is not the
 mechanism to receive explanations of course material.

- Any questions on **laboratory** content can be directed to your TA during regular lab time, asked during the PRA help hours, or posted on the Ed discussion board.
- When you e-mail the teaching team at chm136h@utoronto.ca, please include your full name and student number, PRA section for lab related questions, or TUT section for tutorial related questions. Be sure to use your UTORONTO email address. Keep the language and tone of your email professional. Your email will be answered by the appropriate person.
- Most emails will receive a reply within 24 hours of being sent (except on weekends) but keep your
 expectations reasonable as to the degree of detail that an email reply to your enquiry can realistically
 provide.
- Note that the tutorial and practical teaching assistants (TAs) cannot provide any assistance via email.

ABSENCES

If you are absent from your studies due to illness or other reasons and unable to complete course work (*e.g.*, a term test or an assignment) then a piece of written documentation is required. The following four items are the recognized forms of documentation:

- 1. <u>Absence Declaration via ACORN</u> (please note the circumstances under which an absence declaration can and cannot be submitted)
- 2. <u>U of T Verification of Illness or Injury Form</u>
- 3. College Registrar's letter
- 4. Letter of Academic Accommodation from Accessibility Services

Students who complete the ACORN Absence Declaration form must additionally **email the teaching team (chm136h@utoronto.ca)** with a screenshot of the Acorn Absence Declaration and what graded work you missed as soon as possible and within ONE WEEK of the absence to receive consideration for any missed graded work. Please include your full name, student number, LEC and PRA section in your email. This is essential action for any consideration to be granted.

For extended absences and for absences due to non-medical reasons, make sure to contact your <u>College Registrar's Office</u>. They can help you decide between a request for an extension or other types of academic consideration.

If you suspect or know that you have a disability that is affecting your studies, <u>learn about the services</u> and <u>supports available through Accessibility Services</u>. A disability can be physical disability, sensory disability, a learning disability, mental health disorder or a short-term disability like an injury. If you are not sure whether you have a disability, you can confidentially contact <u>Accessibility Services</u> with your questions.

VI TECHNOLOGY REQUIREMENTS

This course, particularly the lab (quiz and report submissions) and tutorial (TeamUP! submissions) require the use of computers, and technical issues are possible. When working on an assignment, students are responsible for scheduling enough time to allow for reasonable delays due to technical difficulties to be overcome, so such issues will not be acceptable grounds for deadline extension. Particularly, maintaining an up-to-date, independent backup copy of your work is strongly

recommended to guard against *e.g.*, hard-drive failures, corrupted files, lost computers, *etc*. We encourage you to spend a moment at the start of the semester to make a plan for what you would do if you lost access to the computer that you primarily intend to use, which will help ensure that you are prepared for this unlikely possibility.

Specific guidance from the U of T Vice-Provost, Students regarding student technology requirements is available here: https://www.viceprovoststudents.utoronto.ca/covid-19/tech-requirements-online-learning/

VII INSTITUTIONAL POLICIES AND SUPPORT

ACADEMIC INTEGRITY

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In laboratory reports:

- 1. Using someone else's ideas or words without appropriate acknowledgement. Normally, students will be required to submit their written course work (*i.e.*, lab reports) to the University's plagiarism detection tool, Ouriginal, for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their work 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).
- 2. Submitting your own work in more than one course without the permission of the instructor.
- 3. Making up sources or facts.
- 4. Obtaining or providing unauthorized assistance on any report. Please note that the use of websites (such as Chegg.com or the course discussion board) to post laboratory report material/questions or to post/access answers to questions is an academic offence under the **University of Toronto's Code of Behaviour on Academic Matters**. Alleged instances of this nature are forwarded to the Faculty of Arts & Science Student Academic Integrity office.

On quizzes and term tests:

- Using or possessing unauthorized aids. Please note that the use of websites (such as Chegg.com or the course discussion board) to post quiz questions or to post/access answers to questions is an academic offence under the University of Toronto's Code of Behaviour on Academic Matters. Alleged instances of this nature are forwarded to the Faculty of Arts & Science Student Academic Integrity office.
- 2. Looking at someone else's answers or collaborating/discussing answers during a quiz or term test.
- 3. Misrepresenting your identity.

In general academic work:

- 1. Falsifying institutional documents or grades.
- 2. Falsifying or altering any documentation required by the University.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected toseek out additional information on academic integrity from your instructor or from other institutional resources (see www.academicintegrity.utoronto.ca/).

COPYRIGHT

If a student wishes to copy or reproduce class presentations, course notes or other similar materials provided by instructors, they must obtain the instructor's written consent beforehand.

Otherwise, all such reproduction is an infringement of copyright and is absolutely prohibited. More information regarding this is available here: https://teaching.utoronto.ca/ed-tech/audio-video/copyright-considerations/

ACCESSIBILITY NEEDS

Students with diverse learning styles and needs are welcome in this course. The University of Toronto is committed to accessibility: if you require accommodations for a disability, or have any other accessibility concerns about the course, please contact <u>Accessibility Services</u> as soon as possible.

ACCOMMODATIONS FOR RELIGIOUS OBSERVANCES

Following the University's policies, reasonable accommodations will be made for students who observe religious holy days that coincide with the due date/time of an assignment, tutorial, class or laboratory session. Students must inform the teaching team via email (chm136h@utoronto.ca) **before** the session/assignment date to arrange accommodations.

ADDITIONAL SERVICES & SUPPORT

The following are some important links to help you with academic and/or technical service and support:

- General student services and resources at Student Life
- Full library service through University of Toronto Libraries
- Resources on conducting online research through <u>University Libraries Research</u>
- Resources on academic support from the <u>Academic Success Centre</u>
- Learner support at the Writing Centre

ACKNOWLEDGEMENT OF TRADITIONAL LANDS

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca and, most recently, the Mississaugas of the Credit River. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.