



Introductory Chemistry I (CHMA10H) Winter 2015 University of Toronto at Scarborough

Welcome to CHMA10! This course will provide an introduction to the study of chemical properties and transformations of matter from both a macroscopic and microscopic perspective.

To be enrolled in this course you must have previously completed senior-level chemistry in high school (SCH4U or its equivalent) or have permission of the course instructor.

Please take a few minutes to read through this document. It contains important information which will help you to succeed in this course.

Staff:

Instructor:

Dr. Farkhondeh (Fari) Fathi

SW640

416-287-7209

Email: far.fathi@mail.utoronto.ca

Office Hours: Mondays and Wednesdays 3:00–4:30 (Weeks 1-6)

Mondays and Wednesdays 11:30-1:0 (Weeks 7-12)

Lab Coordinator:

Dr. Scott Ballantyne

SW155C

416-287-7220

Email: sballant@utsc.utoronto.ca

Office Hours: Mondays and Wednesdays 10:30 – 12:00 pm

Email Policy:

Please use a valid “utoronto.ca” account for all CHMA10 correspondence. Emails received from other accounts are frequently filtered out as spam and may not be received. When composing your email, please use professional language. Be sure to include the course code as part of the subject line and sign the email with your first and last name, as well as your student ID. Your email will be answered as soon as possible (likely within 36 hours (M-F)).

A note on email content: Please double check the syllabus and the course Blackboard page before emailing a question. The answers to most student questions can be found there! Questions regarding the lecture material/assigned readings/suggested problems should be posted on the discussion board (see below) rather than emailed. This will ensure that others can benefit from the responses provided and avoids having the same questions asked multiple times. Questions on the lab material should be directed to the Questions on the lab material should be directed to Dr. Scott Ballantyne.

Required Textbook:

Chemistry: Human Activity, Chemical Reactivity, 2nd Edition, by Peter Mahaffy, Roy Tasker, Bob Bucat, John C. Kotz, Gabriela C. Weaver, Paul M. Treichel, John E. McMurry

Website:

CHMA10 maintains a Blackboard web space which archives a variety of course-related information including: contact information, class announcements, lecture slides, handouts, assigned readings, suggested end-of-chapter problems, and links to some useful outside resources. In addition, class emails will regularly be sent via Blackboard. ***In order for you to receive these emails, you must have a valid "utoronto.ca" email account registered with ROSI.***

Discussion Board:

An online discussion board will be maintained through Blackboard. This online space will provide you with a place to post questions related to the course material. You may post anonymously, or as yourself. Feel free to answer each other questions as well. The forums will be monitored by the instructor to ensure that all questions are answered accurately. In addition, frequently asked questions (with their answers) may be posted here so be sure to check in periodically.

Mid-Term Test:

There will be one 90-minute term test worth 27% of your final grade (see grading scheme below). This test will be written outside of class time either just before or just after reading week. The exact date, time and location will be announced as soon as this information is made available from the registrar.

Policy on Missed Tests:

Should you miss a term test due to a legitimate reason, you must submit appropriate documentation *within one week of your absence, then, the weight of the midterm mark would be transferred to the final exam.* If the reason for your absence is medical, an official UTSC medical note must be downloaded from the UTSC registrar's site (http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf) and completed by your doctor. ***If no acceptable documentation is received within one week, you will receive a grade of zero for that test.*** Once your absence has been validated, there may be either a make-up test or the weight will be transferred to the final exam.

Final Examination:

There will be a 3-hour, *cumulative* exam written during the end of semester exam period. The exact date, time and location will be announced as soon as they are available. ***Please note that if you miss the Final Exam, you must petition the Registrar's Office to write a make-up exam in the next formal exam period.*** Check the UTSC Calendar for instructions and deadlines.

Labs:

The laboratory component of CHMA10 is compulsory. ***In order to pass the course, you MUST also pass the lab component.***

Lab Schedule:

Laboratory periods are three hours in length and run every other week. Odd numbered practicals (PRA0001, PRA0003 etc.) start the week of January 12^h. Even numbered practicals (PRA0002, PRA0004 etc.) start the week of January 19th.

Lab Manual and Notebook:

A lab manual must be purchased from the UTSC Bookstore before your first lab. You may not use a lab manual from a previous semester: the experiments and course requirements will be different. **DO NOT** wait to purchase your lab manual as it contains a host of important information

DO NOT wait to purchase your lab manual as it contains a host of important information:

- Lab Schedules and other important dates
- Late and absence policies
- Rules regarding safety
- Appropriate attire for the labs
- Marking schemes
- Guidelines on how to properly prepare for the lab

The bookstore **DOES NOT** stock enough lab manuals for everyone. If they run out, you **MUST** preorder a copy with the bookstore – this takes time (up to 5 business days). Failure to adhere to the rules and policies outlined within the lab manual will adversely affect your lab mark – in some instances the impact will be severe.

In addition, students will be required to purchase their own lab notebook. The book must be hard-cover, permanently bound (not spiral or loose leaf) with the approximate dimensions 8.25” x 10.5” inches. They can be purchased at the UTSC bookstore; however students are free to purchase their books at a merchant of their choice (so long as they meet the above requirements).

Lab Skills Seminars

Lab skills seminars are designed to help students prepare for their upcoming laboratories. The sessions will introduce students to important laboratory techniques (and explain why they are

important) and discuss other important topics including safety and lab notebook preparation. There will be one session, on Fridays 1-2:30 pm, held each week; the first week will be for students registered in odd numbered practical's, the following week will be for even numbered practical's (the same material will covered during each biweekly session so it's recommended that students attend only one). Please see the CHMA10H3W blackboard page for the up to date schedule.

Lab Safety:

Safety in the laboratory is an extremely important element in the chemistry program at this University. Failure to follow safe practices can cause laboratory accidents which may result in the loss of time, damage to clothing, and other property, and most importantly personal injury. By following suitable precautions, you can anticipate and prevent situations that would otherwise lead to accidents.

Students registered in CHMA10H3S will be automatically enrolled in the following course:

[Winter-2015-CHMB42H3-S-Winter-2015-CHMA10H3-S-Win: Workplace Hazardous Materials Information System](#)

As part of this course, students will be expected to watch a video (approximately 30 minutes long) and take a multiple choice quiz on the material you just learned. Students must obtain 80% on the quiz to pass the WHMIS course. In addition, students will be required to print off your quiz results and present them to your TA before you will be allowed to enter the lab.

Lab Coats and Safety Glasses:

Lab coats and safety glasses must be worn at all times in the laboratory. Students will be required to purchase approved indirect vented chemical splash safety goggles (mandatory), and a lab coat (mandatory) before attending their first lab. These items can be purchased from both the Environmental and Physical Sciences Student Association (EPSA) and the Biology Student Association (BioSA) or the bookstore. All safety eyewear must meet either ANSI Z87+ or CSA Z94.3 Standard for high impact protection (if you see one of those standards stamped on your eyewear somewhere then they meet that particular standard).

At the first lab session students will be provided with a pair of safety glasses as part of your ancillary fees. The safety glasses can be worn while in laboratory before the lab begins (i.e. during the quiz and lab prep talk). Once the lab begins students will be expected to wear their indirect vented chemical splash goggles.

Labs coats must be 100% cotton – no exceptions.

Further information regarding appropriate attire please see the guidelines outlined in your lab manual. Note that students not wearing approved safety gear will not be allowed to participate in the lab. Note that students not wearing approved safety gear will not be allowed to participate in the lab.

Ancillary Fees:

Students taking CHMA10 will be assessed a \$25.00 ancillary fee which will cover the cost of chemicals, filter paper, Pasteur pipettes and other items consumed over the course of the lab. For more information regarding ancillary fees students are encouraged to visit the following website: <http://www.planningandbudget.utoronto.ca/tuition.htm>

Lab Rules:

- *Be punctual:* The introductory explanations for the experiments and/or quizzes will begin at 10 minutes past the hour.
- *Be prepared:* Each student will be expected to have a good knowledge of the assigned experiment before entering the laboratory.
- *Be there:* Your term mark from the lab is worth a large percentage of your mark. It is based not only on the reports which you submit, but also your performance which depends on your pre-lab preparedness and your overall performance in the lab

Absences from the laboratory:

If you need to miss a laboratory period for any valid reason, you must immediately report it to both your TA and the lab manager (Dr. Scott Ballantyne) by either phone or email. If the reason for your absence is medical, an official UTSC medical note must be downloaded from the registrar's site

(http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf)

and completed by your doctor. *If no reason for your absence is made before your next scheduled lab period, a mark of zero will be given for that lab.*

Please note that students will not be allowed to re-schedule or miss labs on the days of any first year term test or exam. This is a Chemistry Discipline Policy.

Additional Resources:

A Facilitated Study Group (FSG) program organized by the Centre for Teaching and Learning is available to support this course. The FSG program is designed to enhance the student experience, reduce attrition, and help students succeed in historically difficult courses. Detailed information about FSG is available online (<http://ctl.utsc.utoronto.ca/home/fsg>). Please note that tutors in FSG will NOT give out answers to any graded homework or lab assignments.

Calculators:

Only non-programmable, non-communicating calculators are allowed in tests and exams for this course (both lecture and lab).

Invigilators have the authority to check calculators and to confiscate illegal models. Students who have illegal calculators confiscated during a test/exam will be supplied with an allowed calculator but an immediate penalty of 10% will be imposed for that test/exam. Students without a calculator will also be allowed to borrow an allowed model, but at the cost 10% off their mark on that test/exam.

Method of Evaluation:

The following grading scheme will be used in CHMA10.

Graded Work	%
Mid-Term Test	27
Final Exam	48
Laboratory	25
TOTAL	100

To pass this course, the following three criteria must be met:

- Your final course grade **MUST** be at least 50%
- You **MUST** pass the laboratory
- You **MUST** pass either the mid-term test or the final exam

Online Grades:

Individual grades will be posted on the Blackboard as they become available. You **MUST** check these periodically to make sure that the posted grades match your own records. Any discrepancy should be reported **IMMEDIATELY** to the instructor or the lab coordinator, as appropriate.

Lecture Topics:

Below is a brief list of topics that will be covered in this course, along with the corresponding chapters. A more detailed list, with the associated textbook readings and assigned end-of-chapter problems, can be found on Blackboard under the “readings/problems” tab.

- ✓ Chemistry and Human Activity: an Introduction (Chapters 1)
- ✓ Materials (Chapter 2-4)
- ✓ Chemical Reactions, Water and Energy (Chapter 5-7)
- ✓ Atoms and Electrons (Chapter 8)
- ✓ Molecular Structure, Geometry and Stereochemistry (Chapters 9)
- ✓ Chemical Bonding (Chapters 10)
- ✓ Nuclear Chemistry (Chapter 26)
- ✓ Organic Chemistry (Parts of Chapters 19-21, If time permits, optional)

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 AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca.

Academic Integrity:

Academic integrity is one of the cornerstones of the University of Toronto. It is critically important both to maintain our community which honours the values of honesty, trust, respect, fairness and responsibility and to protect you, the students within this community, and the value of the degree towards which you are all working so diligently. Detailed information about how to act with academic integrity, the Code of Behaviour on Academic Matters, and the processes by which allegations of academic misconduct are resolved can be found online: <http://www.artsci.utoronto.ca/osai/students>

According to Section B of the University of Toronto's Code of Behaviour on Academic Matters <http://www.governingcouncil.utoronto.ca/policies/behaveac.htm> which all students are expected to know and respect, it is an offence for students to:

- To use someone else's ideas or words in their own work without acknowledging that those ideas/words are not their own with a citation and quotation marks, i.e. to commit plagiarism.
- To include false, misleading or concocted citations in their work.
- To obtain unauthorized assistance on any assignment.
- To provide unauthorized assistance to another student. This includes showing another student completed work.
- To submit their own work for credit in more than one course without the permission of the instructor.
- To falsify or alter any documentation required by the University. This includes, but is not limited to, doctor's notes.
- To use or possess an unauthorized aid in any test or exam.

There are other offences covered under the Code, but these are by far the most common. Please respect these rules and the values which they protect. Offences against academic integrity will be dealt with according to the procedures outlined in the Code of Behavior on Academic Matters.