Introductory Chemistry I (CHMA10H)
Winter 2014
University of Toronto at Scarborough

Welcome to CHMA10! This course will provide an introduction to the study of chemical transformations of matter from both a macroscopic and microscopic perspective. Please take a few minutes to read through this document. It contains important information which will help ensure your success in this course.

Staff:

Instructor:
Dr. Farkhondeh (Fari) Fathi
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Office Hours: Mondays and Fridays 11:30-1:00 pm

Lab Coordinator:
Dr. Scott Ballantyne
SW155C
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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, unless it is a weekend or holiday).
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 lab coordinator or your TA.

Required Textbook:

Possible Options:
1. Hardcopy--The bookstore is selling the textbook with Mastering Chemistry and the selected students’ solutions manual at a package.
2. Digital ONLY--The Digital Access only is available at UTSC bookstore at the cash register; alternatively students can go online to www.masteringchemistry.com and purchase access to Mastering Chemistry with the E-text;

Note that the Digital only option does not give students access to the students solutions manual, which can be purchased separately.

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. Please note: Posts which contain answers/solutions to Mastering Chemistry homework assignments are not permitted and will be promptly removed.

Online Homework:
There will be weekly homework assignments to be completed using the online homework system MasteringChemistry. To access these assignments, you will need to register with Mastering Chemistry. If you purchase the bundled textbook package at the UTSC bookstore, your MasteringChemistry registration code will be included. If you acquire a copy of the text from another source, you may purchase MasteringChemistry code separately from the UTSC Bookstore.
Assignments will be released every Wednesday evening and will be due the following Tuesday at 9:00 am (unless otherwise noted). **Late assignments will not be graded.**

You can activate your MasteringChemistry account at [www.masteringchemistry.com](http://www.masteringchemistry.com). A detailed instruction for MasteringChemistry registration and login, provided by Pearson, is posted on Blackboard. Please carefully follow this instruction. Once signed in you can: click the Join a Course button on the bottom of the page, and enter your Course ID (CHMA10W2014); Launch your eText; or Explore the Study Area. Finally, it is very important to enter your Student ID.

In addition, the following YouTube video may also help you for registering with Mastering Chemistry: [http://www.youtube.com/watch?v=tLUGNZ-FQyw&feature=youtu.be](http://www.youtube.com/watch?v=tLUGNZ-FQyw&feature=youtu.be).

**Early Assessment Test:**

The first 2 weeks of class will be spent reviewing some of the fundamental concepts learned in high school. To test your mastery of these skills, there will be a **50 minute in-class test on Monday January 27th** worth 5% of your final grade. This test will provide a valuable opportunity for you to get some early feedback and determine how well you understand these essential chemistry skills.

**Mid-Term Test:**

There will be one 90-minute term test worth 20% 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.** 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](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, you will be contacted to schedule a make-up test.

**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 13\textsuperscript{th}. Even numbered practicals (PRA0002, PRA0004 etc.) start the week of January 20\textsuperscript{th}.

**Lab Manual and Notebook:**
A lab manual must be purchased from Environmental and Physical Sciences Student Association (EPSA) located in S520A. 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:
- 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 through EPSA – this takes time. 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 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.

You will be required to enroll in the U of T WHMIS online course (EHS005) accessible through the Portal website using your UTORid. Instructions on how to access the course will be posted on the CHMA10 blackboard site. You will be expected to watch the video (approximately 30 minutes long) and take a multiple choice quiz on the material you just learned. You must obtain 80% on the quiz to pass the WHMIS course. You 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), safety glasses (optional) 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).

Labs coats must not contain more than 65% polyester material.

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.

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. It will be helpful to prepare a point-form pre-lab procedure before coming to the lab.
- 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.

Tutorials:
Tutorials are scheduled in the same time slot as your laboratory but in alternate weeks. Your tutorial section is determined by your practical number. For example, PRA0001 students are assigned to TUT0001. Odd numbered tutorials begin the week of January 20th. Even numbered tutorials begin the week of January 13th. Please check the CHMA10H web site (intranet) for a link to the timetable where you can view the times and room assignments of your tutorials.

Attendance at tutorials is mandatory and will count towards your final grade (see grading scheme below). You are allowed to miss one tutorial without penalty; however, each additional absence will cost you 1 point from your 5 homework/tutorial points. Rescheduling of missed tutorials will not be permitted.

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.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.

<table>
<thead>
<tr>
<th>Graded Work</th>
<th>%</th>
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<tbody>
<tr>
<td>Online Homework</td>
<td>5</td>
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<tr>
<td>Tutorials</td>
<td>5</td>
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<tr>
<td>Early Assessment Test</td>
<td>5</td>
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<tr>
<td>Mid-Term Test</td>
<td>20</td>
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<tr>
<td>Final Exam</td>
<td>40</td>
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<tr>
<td>Laboratory</td>
<td>25</td>
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<tr>
<td>TOTAL</td>
<td>100</td>
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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.

• Review of Chemistry Fundamentals (Chapters 1-4)
• Gases (Chapter 5)
• Thermochemistry (Chapter 6)
• The Quantum Mechanical Model of the Atom (Chapter 7)
• Periodic Properties of the Elements (Chapter 8)
• Chemical Bonding (Chapters 9-10)
• Radioactivity and Nuclear Chemistry (Chapter 19)
• Parts of Chapter 20-21 (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](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.