



**Introductory Chemistry I (CHMA10H)
Winter 2011
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. 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 ensure your success in this course.

Staff:

Instructor:

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Office Hours: Monday, Wednesday, Friday 9 am -10 am

Lab Manager:

Scott Ballantyne
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Office Hours: Tuesdays and Thursdays 10:30-12:00

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.

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 on the lab material should be directed to the lab manager or your TA.

Required Text:

Chemistry: A Molecular Approach, 2nd Ed., by Nivaldo J. Tro. The text has an accompanying study guide/solutions manual which is not required, but is strongly recommended. The UTSC Bookstore sells a bundled package which includes the text, study guide/solutions manual and

the Mastering Chemistry access code or Stand-alone MasteringChemistryPlus access code(see below).

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.***

To login, go to: <https://portal.utoronto.ca/webapps/portal/frameset.jsp>. Click on “log-in to the portal” at the top left. Login using your UTORid username and password (same as what’s used for your UTOEmail). Under the “My Courses” box (top right), click on the link for “Introductory Chemistry I.”

Online Homework:

Weekly problem sets will be assigned and graded through 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 Mastering Chemistry registration code will be included. *If you acquire a copy of the text from another source, you will need to purchase a Mastering Chemistry code separately from the UTSC Bookstore.* Once activated, each Mastering Chemistry Code is valid for 1 year.

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Registration instructions if you already have an active account:

Go to: <http://www.masteringchem.com/>.

- Enter your "login Name" and "Password".
- You will now be prompted for the new course ID. Enter MCRADHAKRISHNAN44199
- This will take you into the Mastering Chemistry program for this course.

Registration instructions if you don’t have an account:

- Go to: <http://www.masteringchem.com/>
- Under the section for “Register” click on the "Students" button.
- Select "Yes I have an access code" and click “continue”
- Click “I accept” to the License Agreement and Privacy Policy
- Select “No” to indicate that you do not have an account and set up your login and password. NOTE: Please use your **UTORid as your login name** to ensure that you receive credit for your mastering chemistry grades.
- Enter your Access Code (acquired with your textbook package or purchased separately from the bookstore) in the field provided.

- Complete the requested account information page. **Make sure that the name you enter is the same as the name on file with ROSI.** Under School Name, select University of Toronto - Scarborough.
- Click on Login Now and follow the instructions above to enroll in the Mastering Chemistry account for this course.

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.** The assignments will be equally weighted and together will count for 5% of your final grade. Note that in the final calculation for the homework grade, the lowest mark will be dropped.

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 30th Jan 2013** worth 5% of your final grade. This 5% will also include class participation and submission of practice assignments. 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 schemes below). This test will be written outside of class time by end of February or early March. 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) 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.

With a validated absence, the value of the missed test will be added to your final exam. Please note that on page 329 of the 2012/2013 UTSC Calendar it states: "You cannot petition to withdraw from a course on the grounds that no work was returned to you before the last day to withdraw without academic penalty if this is the result of your having been given an extension to complete your work for reasons relating to you and not the rest of your class."

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.) begin the week of January 14th.2013 Even numbered practicals (PRA0002, PRA0004 etc.) begin the week of January 21st 2013.

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. 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)

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 the bookstore – 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.

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.

Safety Equipment:

Students will be required to purchase safety goggles (mandatory), safety glasses (optional) and a lab coat (mandatory) before attending their first lab. This year, only specific eyewear models will approved for student use:

Safety Goggles - Uvex Stealth OTG model# S3970DF
Safety Glasses – Nemesis models V30 and V30 VL
Safety Glasses (over prescription eyewear) – Nemesis model V50

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

These items can be purchased from both the Environmental and Physical Sciences Student Association (EPSA) and the Biology Student Association (BioSA).

Further information regarding appropriate attire please see the guidelines outlined in your lab manual.

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. Those 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. To view a complete list of those fees, students are encouraged to visit the following link:

<http://www.planningandbudget.utoronto.ca/Assets/Academic+Operations+Digital+Assets/Planning+Budget/2012-13+Category+5+Ancillary+Fees.pdf>

Tutorials

Tutorials are compulsory and are scheduled within the same time slot as your CHMA10H laboratory but in the alternate week of your assigned laboratory. The duration of the tutorial is one hour. The room assignments for the tutorials **ARE NOT THE SAME** as your labs. Your Tutorial number (TUTXXXX) is the same as your Practical number (PRAXXXX). 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.

Week 1 lab students

Students assigned to tutorial sections ending in **odd numbers**, TUT0001, TUT0003, TUT0005 etc. begin their tutorials during the week of **January 21st, 2013**

Week 2 lab students

Students assigned to tutorial sections ending in **even numbers**, TUT0002, TUT0004, TUT0006 etc. begin their tutorials during the week of **January 14th, 2013**

Additional Resources:

The Chemistry Aid Centre is a student-run, drop-in help centre where students from introductory general chemistry and organic chemistry courses can go for help with lecture and lab material. The centre is staffed with volunteer tutors, all of whom have done well in the course previously and have been trained on how to effectively help others. Students looking for help with the course can visit the centre in P0104, room 107 starting in the second week of classes. Please visit the Chemistry Aid Centre website at <http://www.uts.utoronto.ca/~chemaid/> for up to date scheduling information and tutor profiles. In addition, a Facilitated Study Group (FSG) program organized by the Centre for Teaching and

Learning is also 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 CAC and 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). The following specific models available at UTSC book store are recommended for both CHMA10 and CHMA11:

Texas Instruments:	TI-30X IIS (SKU# 10048306)
Sharp:	EL-520WB (SKU# 10048016), EL-531WB (SKU# 10047965), EL-546WB (SKU# 10047880)
Casio:	FX-260 (SKU# 10009994)

Invigilators have the authority to check calculators during the tests and exams. 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:

Below is the grading scheme that will be used in this course.

Graded Work	%
Online Homework/Tutorial Quiz	5
Early Assessment Test/Practice Assignments/Class Participation	5
Term Test (NO MAKE-UP)*	20
Final Exam	45
Laboratory	25

*If you miss a test, its value will be added to that of the final.

Note: To pass the course, you must pass the laboratory and either the term test or the final exam (and receive a final grade of 50+, of course!)

Online Grades:

Individual grades will be posted on the Blackboard as they become available. Please 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)
- Atomic Structure(Chapter 7)
- Periodic Properties of the Elements (Chapter 8)
- Chemical Bonding (Chapters 9-10)
- Radioactivity and Nuclear Chemistry (Chapter 19)
- Parts of Chapters 22-24 (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.

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 Behaviour on Academic Matters.