

Introductory Chemistry I (CHMA10H)  
Fall 2011  
University of Toronto at Scarborough

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Welcome to CHMA10! This course will provide an introduction to the study of chemical transformations of matter from both macroscopic and microscopic perspective. To be enrolled in this course you must have previously completed general 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 contains important information which will help you to succeed in this course.

Staff:

Instructors:

Professor Heinz-Bernhard Kraatz: SW632, Email: [bernie.kraatz@utoronto.ca](mailto:bernie.kraatz@utoronto.ca)  
– Office Hours, September 19<sup>th</sup>–October 19<sup>th</sup>, Mon and Wed 4:00-5:30 pm in SW632  
Professor Xiao-an Zhang SW511, Email: [xazhang@utsc.utoronto.ca](mailto:xazhang@utsc.utoronto.ca)  
– Office Hours, October 21<sup>st</sup>– December 6<sup>th</sup>, Mon and Wed 4:00-5:30 pm in SW511

Lab Coordinator:

Dr. Scott Ballantyne: Room Number SW155C, Email: [sballant@utsc.utoronto.ca](mailto:sballant@utsc.utoronto.ca)  
- Office Hours: Tues and Thurs 10:30-12:00 pm

Email Policy:

Please use a valid “utoronto.ca” or “utsc.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 this syllabus the before emailing us with a question. Questions on the lab material should be directed to the lab coordinator or your TA.

Text:

Chemistry: A Molecular Approach, 2<sup>nd</sup> Ed., by Nivaldo Tro.  
There are three different purchasing options from the UTSC bookstore:  
OPTION 1  
Hardcopy of the text  
Mastering chemistry access code  
Students selected solutions manual

OPTION 2

E-book version of the text  
Mastering chemistry access code  
Students selected solutions manual

OPTION 3 (*See the bookstore cash for this option; it is not stocked on the bookstore shelves*)

E-book version of the text  
Mastering chemistry access code

#### Online Homework:

There will be weekly homework assignments to be completed using the online homework system 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.

Instructions for setting up your account can be found in the package. Once registered, you will need to enroll in the Mastering Chemistry page for this course. To do this, enter the Course ID: CHMA102011

Assignments will be released every Wednesday at 5:00 pm and will be due the following Wednesday at 9:00 am. Late assignments will not be graded. The assignments, together with the tutorial quizzes, will be equally weighted and together count for 5% of your final grade.

#### Website:

CHMA10 maintains the Blackboard web space which archives a variety of course-related information. There are two instructors for the course and at the beginning of each of their sections, they will inform you where you will find: contact information, class announcements, lecture slides, handouts, assigned readings, student end-of-chapter problems, and links to some useful outside resources.

*\*Accessing WebOption Lecture Videos\**

WebOption lecture videos can be accessed at the Blackboard via the "Lecturecasts" link.

#### Term Test – 25% of final grade:

There will be a 100-minute term test around the middle to end of October which will count as 25% of your final grade. This test will be written outside of class time. The exact date, time and location will be announced as soon as this information is made available from the registrar.

With a validated absence, the value of the missed work will be added to your final exam. Please note that on page 328 of the 2011/2012 UTSC Calendar it states: "You cannot petition to withdraw from a course on the grounds that no work 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 – 45% of final grade:

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. 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 practical's (Week 1 students) begin the week of September 19. Even numbered practical's (Week 2 students) begin the week of September 26.

#### 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 as experiments are different! A lab notebook will be given to you during your first lab period.

#### Lab Coats and Safety Glasses

Lab coats and safety glasses must be worn at all times in the laboratory. If you wear prescription eye glasses, you must purchase a pair of safety goggles that fit over your eye glasses. These items can all be purchased from the UTSC Bookstore or the Environmental and Physical Sciences Student Association (EPSA) in the Physics Aid Centre, room SW505.

[http://www.utsc.utoronto.ca/~registrar/resces/pdf\\_general/UTSCmedicalcertificate.pdf](http://www.utsc.utoronto.ca/~registrar/resces/pdf_general/UTSCmedicalcertificate.pdf) 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 slots as laboratory but in the alternate week. Your tutorial section is linked to your lab section and is the same section number as your lab section (i.e. PRA0001 students are assigned to TUT0001).

Attendance at the tutorials is compulsory and tutorial quizzes will count towards your final grade (see grading scheme below).

#### 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 materials. The centre is open from 10-4 pm Monday through Thursday and is located in SW221 (one floor above the chemistry teaching labs). 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. In addition, a Related 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 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 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%

Term Test (NO MAKE-UP)*	25%
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 when 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.

#### Professor Kraatz

Review of Chemistry Fundamentals (Chapters 1-4)

Gases (Chapter 5)

Thermodynamics and Equilibrium (Chapter 5)

Atomic Structure (Chapter 5)

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To include false, misleading or concocted citations in their work.