

# Introductory Chemistry I (CHMA10H) Winter 2016 University of Toronto at Scarborough



Welcome to CHMA10! 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:**

Prof. Effie Sauer Room Number EV554 416-287-7209

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Office Hours: Mondays and Wednesdays, 12:30-2:00 pm

## **Lab Coordinator:**

Dr. Scott Ballantyne Room Number SW155C

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Office Hours: Mondays 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 – likely within 36 hours, unless it is a weekend or holiday.

**A note on email content**: Please double check this 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: Human Activity, Chemical Reactivity, 2nd Canadian Edition, by Peter Mahaffy, Bob Bucat, Roy Tasker, John C. Kotz, Paul M. Treichel, Gabriela C. Weaver, and John E. McMurry. The text has an accompanying students' solutions manual which is not required, but is recommended. The UTSC Bookstore sells the text bundled together with the solutions manual and an OWL access code (see below). The bundles are available in paper and digital form (i.e. an eBook version).

## Website:

CHMA10 maintains a Blackboard web space which archives a variety of course-related information including: class announcements, lecture slides, assigned readings, suggested end-of-chapter problems, grades 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 ACORN*.

## Online Homework:

For each textbook chapter that's discussed in class, there will be an associated problem set assigned and graded through the online homework system OWL. To access these assignments, you will need to register with OWL. If you purchase the bundled textbook package at the UTSC bookstore, your OWL registration code is included. *If you acquire a copy of the text from another source, you will need to purchase an OWL code separately from the UTSC Bookstore*. Once activated, each OWL code is valid for 2 years.

Assignments will be released within 24 hours of the corresponding chapter having been completed in lecture. They will be due 1 week from the posting date 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.

## Mid-Term Test:

There will be one 90-minute term test worth either 25% of your final grade. 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 the term test due to a legitimate reason, you must submit appropriate documentation *within 2 business days 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 (<a href="http://www.utsc.utoronto.ca/~registrar/resources/pdf\_general/UTSCmedicalcertificate.pdf">http://www.utsc.utoronto.ca/~registrar/resources/pdf\_general/UTSCmedicalcertificate.pdf</a>) and completed by your doctor. Note that the completed note must meet the following criteria:

- Your physician must have examined you during the period of illness/injury (not after the fact)
- The missed lab period must fall within the indicated start date and anticipated end date
- The physician must rank your illness as either moderate, serious or severe; illnesses deemed mild or negligible will not be considered valid excuses.

If no acceptable documentation is received within 2 business days of your absence, you will receive a grade of zero for the 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.) begin the week of January 11<sup>th</sup>. Even numbered practicals (PRA0002, PRA0004 etc.) begin the week of January 18<sup>th</sup>.

# 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:

- 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. Seminars will be held on Fridays from 3-4 pm in SW128, starting on January 8<sup>th</sup>. 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 be covered during each biweekly session so it's recommended that students attend only one). Your lab skills seminar leaders this year will be Reema Abdoulrezzak and Supreet Aashat. Please see the CHMA10 blackboard page for an up to date schedule and any

#### 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 CHMA10 will be automatically enrolled in the following course on Blackboard:

Winter-2016-CHMA11H3-S-Winter-2016-CHMB42-S-Win: Workplace Hazardous Materials Information System (WHMIS)

As part of this course, students are 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 are required to print off their quiz results and present them to their TA before you will being 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.

For 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: <a href="http://www.planningandbudget.utoronto.ca/tuition.htm">http://www.planningandbudget.utoronto.ca/tuition.htm</a>

## 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 final grade. 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 and completed by your doctor.

http://www.utsc.utoronto.ca/~registrar/resources/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.

## 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 during the tests and exams. Students who have illegal calculators confiscated 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:

Your grade will be calculated as follows:

Graded Work	Weight
Online Homework*	5
Mid-Term Test	25
Final Exam	45
Laboratory	25
TOTAL	100

<sup>\*</sup>The lowest grade will be dropped.

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 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 manager, as appropriate.

# Lecture Topics:

The following chapters will be taught in this course. A more detailed list of assigned textbook readings and suggested end-of-chapter problems can be found on Blackboard under the "readings/problems" tab.

- Chemistry: A Human Activity (Chapter 1)
- Building Blocks of Materials (Chapter 2)
- Models of Structure to Explain Properties (Chapter 3)
- Chemical Reaction, Chemical Equation (Chapter 5)
- Chemistry of Water, Chemistry in Water (Chapter 6)
- Chemical Reactions and Energy Flows (Chapter 7)
- Modelling Atoms and their Electrons (Chapter 8)
- Modelling Bonding in Molecules (Chapter 10)
- Nuclear Chemistry (Chapter 26)

# 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 Access/Ability Services as soon as possible. Access/Ability Services staff (located in Rm SW302, Science Wing) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email ability@utsc.utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

# 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 <a href="http://www.governingcouncil.utoronto.ca/policies/behaveac.htm">http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</a> 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.