FALL 2014 COURSE SYLLABUS

To describe and introduce the fundamentals of Analytical Chemistry. To provide you the basic lab and classroom tools need to progress further in the fie laemail: andre.simpson@utoro
Research Building
s 12-pm in the Environmental NMR Centre (SY050)

(Practical), e-mail: far.fathi@mail.utoronto.ca
e Wing
1:30 – 3:00 pm; Thursdays 1:30-3 pm

Mon 9-12 am in SW319

https://lecturecast.utsc.utoronto.ca/login.php.

Students are strongly encouraged to reiterate what they learn in lectures with the relevant sections from the following textbook:

Fundamentals of Analytical Chemistry, Skoog/West/Holler/Crouch, 9th Edition.
Brooks/Cole CENGAGE Learning.

Note: Lecture topics include suggested review problems from the text. Such material may be included on tests, tutorials, and exams.

Student Solutions Manual for Skoog/West/Holler/Crouch's Fundamentals of Analytical Chemistry, 9th Edition

The solutions manual is useful for testing and confirming your own learning. We will not specifically refer to or use the solutions manual in this class.

The UTSC book store is currently stocking a package of both the text book and the solutions manual. This is at a discounted price and is the best value

It is strongly recommended that befor

PLEASE DOWNLOAD AND PRINT THE LECTURE MATERIAL BEFORE YOU COME TO EACH CLASS FROM BLACKBOARD. THERE WILL BE SPECIAL “EASY PRINT” FORMAT. BRING THE NOT

of materials and services used during the labs 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+$!26+Budget/2012-13+Category+5+Ancillary+Fees.pdf

Students are welcome to ask questions or resolve course-related problems by contacting the Course Instructor either by dropping in during scheduled office hours or by making an appointment. Students are responsible for work missed as a result of absence; the Course Instructors will not re-teach material covered in the lectures and lab sessions.

The exact dates of the mid-term tests are provided in the Course Topics schedule. Students who miss the term test will be assigned a mark of zero for the test, unless they can document an appealing reason for missing it. Students in that position must submit a written request to the Course Instructor with appropriate documentation. If a request is accepted for the mid-term test, the weighting of the mid-term will be included to the final exam. There will be no make-up mid-term tests.

The final examination will take place during the UTSC examination period in December following the end of the course. The exact date will be provided when the examination is scheduled.

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 Office as soon as possible. The UTSC *Access Ability* 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
The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

During lectures and labs please put your cell phones in silent mode to avoid disruption of the class. If circumstances warrant use of your cell phone and you must receive an emergency call, please inform the Course Instructor at the beginning of the session in advance and then excuse yourself from the session to respond to the call outside the lecture hall or laboratory.

Further information about academic regulations and course withdrawal deadlines can be found in the UTSC Calendar. You are encouraged to read this material.

If you need assistance with effective writing skills, study skills, exam preparation, note taking, or time management, free workshops and advice are available from the Centre for Teaching and Learning, which can be reached at:

is now offering students help with any sort of questions they may have related to mathematics and statistics courses. Our components involve advanced math skills. If the students are struggling, they are encouraged to drop in at AC312 and use the available general help hours. The schedule can be viewed at the link:

http://ctl.utsc.utoronto.ca/mslc/

Ethical use of University computers is expected at the University of Toronto Scarborough. Guidelines are set out in the UTSC Calendar. It is expected that the equipment and/or resources accessed in the UTSC Library and the computer labs are to be used for academic research, assignments, and course activities only.

Honesty and fairness are considered fundamental to the University's mission, and, as a result, all those who violate those principles are treated as if they were damaging the integrity of the University itself. When students are suspected of cheating or a similar academic offence, they are typically surprised at how formally and seriously the matter is dealt with and how severe the consequences can be if it is determined that cheating did occur. The University of Toronto treats cases of cheating and plagiarism very seriously.
Examples of offences for which you will be penalized include (but are not limited to):

Date	Topic	Reading/Learning Objectives/Suggested Problems**
Sept 8th 2014	Intro – Basics/Fun Lecture	Chapter 1 and Chapter 4. You need to know how to do basic calculations involving moles, masses, concentrations, volumes. You need to know the basics of stoichiometry, and what ppm, ppb, ppt concentrations are. Make sure you can solve and understand examples 4-1, 4-2, 4-3, 4-5, 4-12, 4-13 from the text book. These ideas will be used in future calculations.
Sept 15th 2014	Errors and Statistics	Chapter 5, Chapter 6, Chapter 7 Basics and types of errors, confidence intervals, normal distribution and Gaussian curves, error propagation, precision, accuracy, standard deviation, T-test, Q-test, basics of ANOVA. Make sure you can solve and understand examples*** , 5-1, 5-2, 6-1, 6-3, 6-4, , 7-1, 7-6, 7-7, 7-11 from the text book.

*Percent of the lecture section. The lecture sections are worth 60% and the labs 40% of the course.
**Use the text book to reiterate your understanding of topics covered in class. Topics not mentioned in the lectures will NOT be on the exams.
***You should make sure you understand and perform the calculations in these examples, similar questions may be on the exam.