CHEMISTRY 1050 **STUDENT COURSE INFORMATION** **FALL 2016**

CHEM*1050 General Chemistry II F,W (3-3) [0.50]

This course provides an introductory study of the fundamental principles governing chemical transformations: thermodynamics (energy, enthalpy, and entropy); kinetics (the study of rates of reactions); and redox/electrochemistry.

*Prerequisite(s): CHEM*1040*

●Lecturer for this course is Professor Monteiro (extension 53447; rooms 230, 333 or 346 MacNaughton).

●The book that will be used for discussions and chapter-based homework assignments is the 10th edition of Ebbing and Gammon, Houghton Mifflin Co. Copies of the textbook and solutions manual are available in the library.

●In this course, material encompassing the fields of thermochemistry (chapter 6), thermodynamics (chapter 18), energetics of ionic compounds (chapter 9), electrochemistry (chapter 19), reaction rates (chapter 13), and radioactive decay (chapter 20) will be discussed.

●Homework assignments based on scientific concepts discussed in class and textbook material will be given out in class throughout the semester.

●Your final grade will be calculated as follows:

Three (3) Mid-term in-class Exams	30% (10% each)
Wet Labs	15%
Online Dry Labs	10%
Final Examination	45%

●Dates and locations of midterm exams will be announced in class.

●Check WebAdvisor for final exam information.

●Final exam is cumulative.

●No make-up mid-term exams will be given. If you miss any mid-term exam, a grade of zero will be assigned. However, within one week of the missed mid-term, you may provide justification/documentation to Prof. Monteiro for your absence – which if justified – the percent value of the mid-term exam will be added to the final examination.

●In the case of a missed final examination you should consult the Undergraduate Calendar for the appropriate course of action.

●Exams will be closed book. No written or printed materials of any kind are permitted.

●Electronic calculators may be used during examinations when allowed (electronic calculator with ln, exp or e^x, $\log_{10}$ and 10^x functions). Calculators or notebook computers capable of storing text information are not allowed in the examinations.

●**Wet Lab Exemptions:** Laboratory Exemptions for students who are repeating CHEM*1050. Students who obtained a "wet" lab grade of at least 60%, but who failed the course as a whole, may apply for a lab exemption. The lab work must have been completed during one of the three preceding semesters in which the course was offered. Apply online at www.chemistry.uoguelph.ca/labexemption. NOTE: Students repeating CHEM*1050 who are granted a "wet" lab exemption must still complete the online "dry" computer labs.

●**Laboratory Manual** for CHEM* 1050 and **safety goggles** (not safety glasses) can be purchased in the Department of Chemistry, SCIE 2101. A **lab coat** is also required.

●**Online Lab Safety Course:** You will need to complete the Lab Safety Course online. You will find the course in your list of Course Link courses and it is entitled "Student Science Safety". You must complete this course with a grade of 90% or better before you undertake any labs in the course. When you complete it, you will receive an electronic badge in Course Link which can be shown to your T.A. You will have an unlimited number of attempts to complete the safety course to obtain the passing grade.

●**Office Hours**: Monday (10AM to 11AM), Wednesday (11 AM to 12 noon) and Friday (12 noon to 1PM) in room 333 MacNaughton Building.

●**First laboratory:** You must attend your first lab in order to receive mandatory safety training and all the required information from your TA. If you do not attend the lab in week 1, you may lose your place. As proof that you are registered in the lab, you must bring a computer print-out (dated Sept. 1or later) of "My Class Schedule" from WebAdvisor to your first lab.

E-mail Communication

As per university regulations, all students are required to check their University e-mail account regularly: e-mail is the official route of communication between the University and its students.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration:
http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Drop Date

November 4 (2106) is the last day to drop course. For regulations and procedures for dropping this course, see the Undergraduate Calendar.

Copies of out-of-class assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to show your work at any time.

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Student Accessibility Services as soon as possible.

For more information, contact SAS at csd@uoguelph.ca.

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:
http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs:
http://www.uoguelph.ca/registrar/calendars/index.cfm?index

FALL 2016 CHEM*1050 LABORATORY SCHEDULE

DATE	WEEK A Schedule (Sections ending with **ODD** number)	Activity	WEEK B Schedule (Sections ending with **EVEN** number)	Activity
Week 1 Sept. 12 – 16	**Arrive for regular starting time.** Sign-in & safety training. Safety training is mandatory and a legal requirement.	Bring Class Schedule & Lab Manual	**Arrive 90 min AFTER regular starting time** (*i.e.*, 10 AM, 4 PM or 8:30 PM)**.** Sign-in & safety training. Safety training is mandatory and a legal requirement.	Bring Class Schedule & Lab Manual
Week 2 Sept. 19 – 23	**Arrive at regular starting time.** Experiment 1: Equilibrium Constant	**Pre-lab Quiz on Exp't 1**	**Do not go to lab room this week.** *Online Computer Lab: Dry Lab A: Bomb Calorimeter*	*Dry Lab A Marking Module*
Week 3 Sept. 26 – 30	**Do not go to lab room this week.** *Online Computer Lab: Dry Lab A: Bomb Calorimeter*	*Dry Lab A Marking Module*	**Arrive at regular starting time.** Experiment 1: Equilibrium Constant	**Pre-lab Quiz on Exp't 1**
Dry Lab A Marking Module DEADLINE: Sunday, October 2, 11:55 PM				
Week 4 Oct. 3 – 7	**Arrive for regular starting time.** Experiment 2: Enthalpy of Formation	**Pre-lab Quiz on WHMIS & Exp't 2**	**Do not go to lab room this week.** *Online Computer Lab: Dry Lab B: $\Delta G°$, $\Delta H°$ and $\Delta S°$*	*Dry Lab B Marking Module*
Week 5 Oct. 12 – 14 (No classes Oct. 10 & 11)	**No Lab. Independent Study.**	**No pre-lab quiz**	**No Lab. Independent Study.**	**No pre-lab quiz**
Week 6 Oct. 17 – 21	**Do not go to lab room this week.** *Online Computer Lab: Dry Lab B: $\Delta G°$, $\Delta H°$ and $\Delta S°$*	*Dry Lab B Marking Module*	**Arrive at regular starting time.** Experiment 2: Enthalpy of Formation	**Pre-lab Quiz on WHMIS & Exp't 2**
Dry Lab B Marking Module DEADLINE: Sunday, October 23, 11:55 PM				
Week 7 Oct. 24 – 28	**Do not go to lab room this week.** *Online Computer Lab: Dry Lab C: Electrolysis*	*Dry Lab C Marking Module*	**Arrive at regular starting time.** Experiment 3: Voltaic Cells Quiz on Experiment 3	**Pre-lab Quiz on Exp't 3**
Week 8 Oct. 31 – Nov. 4	**Arrive at regular starting time.** Experiment 3: Voltaic Cells Quiz on Experiment 3	**Pre-lab Quiz on Exp't 3**	**Do not go to lab room this week.** *Online Computer Lab: Dry Lab C: Electrolysis*	*Dry Lab C Marking Module*
For any valid Expt. 1 & 2 lab absence(s),submit documentation through the General Lab Marker system before the end of this week.				
Dry Lab C Marking Module DEADLINE: Sunday, November 6, 11:55 PM				
Week 9 Nov. 7 – 11	**Do not go to lab room this week.** *Online Dry Lab D: Catalytic Hydrolysis of Salicin*	*Dry Lab D Marking Module*	**Arrive at regular starting time.** Experiment 4: Chemical Kinetics Report due in three days.	**Pre-lab Quiz on Exp't 4**
Week 10 Nov. 14 – 18	**Arrive at regular starting time.** Experiment 4: Chemical Kinetics Report due in three days.	**Pre-lab Quiz on Exp't 4**	**Do not go to lab room this week.** *Online Dry Lab D: Catalytic Hydrolysis of Salicin*	*Dry Lab D Marking Module*
Week 11 Nov. 21 – 25	**Arrive at regular starting time.** Clean-up and check out.		**Arrive 90 min after regular starting time.** Clean-up and check out.	
Any remaining lab excuses are due by **Friday Nov. 25** through the General Lab Marker system else a grade of zero is assigned.				
Dry Lab D: Catalytic Hydrolysis of Salicin DEADLINE: Sunday, November 27, 11:55 PM				