Fall 2018 Student Course Information CHEM*1050 General Chemistry II Department of Chemistry University of Guelph

Course Description: CHEM*1050 General Chemistry II F,W, (3-3) [0.50 credit] 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: CHEM*1040

Instructor: R. de Laat (SSC 2506)

EMAIL:rdelaat@uoguelph.caLectures:LEC Mon, Wed, Fri12:30PM - 01:20PMWMEM, Room 103Laboratory:Times and locations are listed on WebAdvisor (http://webadvisor.uoguelph.ca/).

1. COURSE MATERIALS

(a) Textbook: D. Ebbing and S. Gammon, <u>General Chemistry</u>. Students can use the 10th, 9th or 8th ed. The publisher provides a 10th ed. textbook package including the Student Solutions Manual. This package can be purchased from one of the campus bookstores.
Note: 10th adjition copies of text and solutions manual are on Library Course Pasarya.

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- (b) **CHEM*1050 Laboratory Manual** can only be purchased from the Chemistry Department. Sept. 6, 7, 10, 11, and 12, 9:30 AM to 3:30 PM in SSC 2106.
- (c) **Safety Goggles** (not safety glasses) and a **Lab coat** are **required**. Goggles can be purchased from the Chem. Department or University Bookstore.
- (d) **Scientific calculator** with ln, e^x , \log_{10} and 10^x functions. Note: Calculators or notebook computers capable of storing text information are **<u>NOT</u>** allowed in examinations.
- (e) **MasteringChemistry** (optional) to complete the optional online homework assignments one must purchase access to a MasteringChemistry account. There is a grace period on payment of two weeks, so one can explore the site prior to paying. A 24-month access card can be purchased through one of the campus bookstores or you can purchase access online through the MasteringChemistry site with either a credit card or PayPal account. To set-up an account, follow the registration instructions provided on CourseLink under Content >> Main Course Resources>>Mastering Chemistry.

2. "WET" LABORATORY – Begins the week of Monday, Sept. 10! Bring your lab manual.

The laboratory is a required component of CHEM*1050. A schedule is provided on page 3. Students attend their labs according to their lab section number. For example, CHEM*1050*0125 has the section number 0125, where the last two numbers represent the lab section . If your lab section ends with an **odd** number (*i.e.*, 1, 3, 5, 7 or 9), you follow the "**WEEK A Schedule**". If it ends in an even number (*i.e.*, 2, 4, 6, 8 or 0), you follow the "**WEEK B Schedule**".

(a) Mandatory First Lab Meetings – Monday, Sept. 10 to Friday, Sept. 14.

Students <u>must</u> attend their first lab to receive mandatory safety training required by law. This safety lab is a pre-requisite for all subsequent labs. As proof of your registration, you must bring a computer print-out dated **Sept. 01, 2018 or later** of WebAdvisor's "*My Class Schedule*" or a device that can display it electronically. You do not need a lab coat or googles for this first lab meeting, but you do need your CHEM*1050 lab manual.

(b) Mandatory Online Lab Safety Course: You must complete the CourseLink course entitled "Student Science Safety" with a grade of 90% or better before you can undertake any labs. It takes 2-3 hours to complete. You have unlimited attempts to obtain the passing grade. Upon successful completion, you receive an electronic badge that you will need to show your T.A. (print or electronic form), as proof of completion, prior to being allowed to participate in Experiment #1.

(c) Online "Wet" Pre-lab Quizzes – CHEM*1050 CourseLink site

Pre-lab quizzes are worth 3% of your final grade and are based on the "wet" lab activities that you are about to perform – **refer to the Lab Schedule**. To prepare for these quizzes, review the material in your lab manual. You have two attempts at each quiz. If a quiz is not attempted, a grade of zero is assigned. To access, go to *Quizzes* on the Main CourseLink page. NOTE: Each quiz is available for review after the deadline and for a two week period.

Everyone has the same due date for the Pre-Lab Quizzes. The experiments will be discussed in class after the pre-lab quiz is due:

Pre-lab Quiz#1 (Expt#1)	due	Sept.	14, 2018 11:00 AM
Pre-lab Quiz#2 (Expt#2)	due	Sept.	28, 2018 11:00 AM
Pre-lab Quiz#3 (Expt#3)	due	Oct.	19, 2018 11:00 AM
Pre-lab Quiz#4 (Expt#4)	due	Nov.	2, 2018 11:00 AM

(d) Laboratory Reports – submitted electronically online

Lab reports are submitted through Chemistry's online General Lab Marker System (ULAB). During your lab period, you collect your data and submit a copy to your TA before leaving the lab. You then complete your lab report and submit it online for grading. Lab reports are normally due one week after your lab period and by 11:55 PM (If your lab was Monday your report is due the next Monday by 11:55 PM unless indicated otherwise on the lab schedule). Marks are deducted for lateness. Further info and the link to the site are provided on CourseLink, under *Content* >> *Laboratory Resources*. Additional information can be found in the Introduction section of your lab manual.

(e) **Missed Laboratory:** Refer to the "*Purple Page for Lab Absences in First-Year Chemistry*" posted on the CHEM*1050 course, under *Content* >> *Laboratory Resources*.

(f) Laboratory Exemptions for students who are repeating CHEM*1050

DEADLINE: TUESDAY, Sept. $11 \rightarrow$ *www.chemistry.uoguelph.ca/labexemption*

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 (*i.e.*, W'18, F'17 or W'17).

NOTE: Students granted a "wet" lab exemption **must** still complete the online "dry" labs.

FALL 2018 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. 10 – 14	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. for 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. 17 – 21	Arrive for regular starting time. Experiment 1: Equilibrium Constant.	Report due in 1 week by 11:55 PM	Do not go to lab room this week. Online Computer Lab: Dry Lab A: Bomb Calorimetry	Dry Lab A Marking Module			
Week 3 Sept. 24 – 28	Do not go to lab room this week. Online Computer Lab: Dry Lab A: Bomb Calorimetry	Dry Lab A Marking Module	Arrive for regular starting time. Experiment 1: Equilibrium Constant.	Report due in 1 week by 11:55 PM			
Dry Lab A: Bomb Calorimetry Marking Module DEADLINE: Sunday, September 30 th , 11:55 PM.							
Week 4 Oct. 1 – 5	Arrive for regular starting time. Experiment 2: Enthalpy of Formation.	Report due in 1 week by 11:55 PM	Do not go to lab room this week. Online Computer Lab: Dry Lab B: ΔG°, ΔH°, and ΔS°.	Dry Lab B Marking Module			
Week 5 Oct. 10 – 12 (No classes Oct. 8 & 9)	No Lab. Independent Study.	No pre-lab quiz.	No Lab. Independent Study.	No pre-lab quiz.			
Week 6 Oct. 15 – 19	Do not go to lab room this week. Online Computer Lab: Dry Lab B: ΔG [°] , ΔH [°] , and ΔS [°] .	Dry Lab B Marking Module	Arrive for regular starting time. Experiment 2: Enthalpy of Formation.	Report due in 1 week by 11:55 PM			
Dry Lab B: Determination of ΔG° , ΔH° , and ΔS° Marking Module DEADLINE: Sunday, October 21 st , 11:55 PM.							
Week 7 Oct. 22 – 26	Arrive for regular starting time. Experiment 3: Voltaic Cells.	Report due in 1 week by 11:55 PM	Do not go to lab room this week. Online Computer Lab: Dry Lab C: Electrolysis	Dry Lab C Marking Module			
Week 8 Oct. 29 – Nov. 2	Do not go to lab room this week. Online Computer Lab: Dry Lab C: Electrolysis	Dry Lab C Marking Module	Arrive for regular starting time. Experiment 3: Voltaic Cells.	Report due in 1 week by 11:55 PM			
Dry Lab C: Electrolysis Marking Module DEADLINE: Sunday, November 4 th , 11:55 PM.							
Week 9 Nov. 5 – 9	Arrive for regular starting time. Experiment 4: Chemical Kinetics.	Report due in 3 days by 11:55 PM	Do not go to lab room this week. Online Computer Lab: Dry Lab D: Catalytic Hydrolysis of Salacin	Dry Lab D Marking Module			
Week 10 Nov. 12 – 16	Do not go to lab room this week. Online Computer Lab: Dry Lab D: Catalytic Hydrolysis of Salacin	Dry Lab D Marking Module	Arrive for regular starting time. Experiment 4: Chemical Kinetics.Report due in 3 days by 11:55 PM				
Week 11 Nov. 19 – 23	Arrive at regular starting time. Clean-up and check-out.	No pre-lab quiz.	Arrive 90 minutes after regular starting time. Clean-up and check-out.	No pre-lab quiz.			
Dry Lab D: Catalytic Hydrolysis of Salacin Marking Module DEADLINE: Sunday, November 25 th , 11:55 PM.							
Week 12 Nov. 26 – 30	No Lab. Independent Study.	No pre-lab quiz.	No Lab. Independent Study.	No pre-lab quiz.			
	Any remaining lab excuses must be s	submitted by 5 PM	I on Friday Nov. 30, else a grade of zero i	s assigned.			

3. EVALUATION

(a) The final course grade will be calculated based on the scheme that produces the highest grade: Scheme #1: Scheme #2: Course Components Optional Online Homework (MasteringChemistry) 10% 0% Online "Wet" Pre-lab Quizzes (CourseLink) 3% 3% Online "Dry" Lab Work (CourseLink) 10% 10% "Wet" Lab Reports (General Lab Marker System) 12% 12% Test 1 in class Wed. Oct. 17 13% 15% Test 2 in class Wed. Nov 14 13% 15% 39% Final Exam Wed. Dec 5 11:30AM 1:30PM 45%

Note: A final course grade of 50% is required to pass the course and receive credit.

(b) **Optional Online Homework (MasteringChemistry)**

Chemistry is not a subject that can be easily learned by simply reading a book. To consolidate your understanding, one must work with the course concepts on a regular basis. Interactive homework is a way to keep up and test your understanding. If you choose to complete the online homework, your exam weights will be reduced (see Scheme #1 above). Following the instructions provided on CourseLink under Content >> Mastering Chemistry to set-up an account. If you had a MasteringChemistry account from a previous semester sign on using your login and password from that previous semester – DO NOT create a new account. You MUST complete the "Introduction to MasteringChemistry" assignment to learn how to use the Mastering Chemistry system. There are no grades for the Introduction to MasteringChemsitry assignment. There are 11 assignments for grades. Each is comprised of a quiz (weighted 40%; 2 attempts/question) and adaptive follow-up questions (60%; multiple attempts), generated once the quiz questions have been attempted. If you receive 95.0% or higher on the quiz, you are exempted from its adaptive follow-up questions. Your worst assignment score will be dropped prior to calculating your final homework grade. Quizzes are due **Fridays by 11:55 PM, starting Sept. 21**, and adaptive follow-ups are due **the following Tuesday**. If an assignment is not attempted, a grade of zero will be assigned. If you need assistance, e-mail *mstrngspprt@gmail.com*

(c) **Practice Online Quizzes** – not for credit (*CourseLink: Quizzes*)

Topic specific practice quizzes are posted which you can attempt multiple times, to test your knowledge throughout the semester.

(d) Are you ready for class? Quizzes - not for credit (*CourseLink: Quizzes*)

To help you prepare for class each week (first quiz due Sept. 17) there are 10 **Are you ready for class?** Quizzes. These Quizzes are designed to work with the Guided Readings to help you try out some questions before coming to class. These quizzes close each Monday beginning Sept. 17 and will **NOT** reopen. Questions from these quizzes may be used on the Tests and Final Exam.

(e) **Online "Dry" Laboratory Experiments** (*CourseLink: Content >> Online "Dry" Labs*) **Online "Dry" Marking Modules** (*CourseLink: Quizzes*)

Each online lab consists of 2 parts: the *experiment* and the *marking module*. Both are delivered through the course website. Background info and worksheets are provided in your laboratory manual. Experiments can be done as many times as you wish, however, some labs assign a new "unknown" number with each attempt. Make sure to record this number for grading purposes. Once you have completed <u>all</u> calculations, <u>only then</u> open the marking module to evaluate your work. You have only one attempt and 60 minutes to enter your answers. If a marking module is not attempted, a grade of zero is assigned. The Lab Schedule includes suggested dates to complete these labs and the deadlines for the marking modules.

1. Dry Lab A: Bomb Calorimeter.

Your results must be submitted to the Marking Module by Sun. Sept. 30 at 11:55 p.m.

2. Dry Lab B: ΔG° , ΔH° , ΔS°

Your results must be submitted to the Marking Module by Sun. Oct. 21 at 11:55 p.m.

3. Dry Lab C: Electrolysis.

Your results must be submitted to the Marking Module by Sun. Nov. 4 at 11:55 p.m. 4. Dry Lab D: Catalytic Hydrolysis of Salacin.

Your results must be submitted to the Marking Module by Sun. Nov. 25 at 11:55 P.M.

NOTE: Results are made available for review only after the class deadline and for two weeks.

(f) **Test 1** in class Wed. Oct. 17 – Thermochemistry and thermodynamics

Test 2 in class Wed. Nov 14 – Mostly Electrochemistry (maybe some Thermo) Both Tests will be multiple choice.

Final Examination: Wed. Dec 5 11:30AM 1:30PM

This multiple choice exam evaluates the entire course.

All examinations are closed book. Notes, printed material of any kind, any communication with other students or any other aids are <u>not</u> permitted. Computers or calculators capable of storing text information or formulas are **not permitted**.

4. POLICY ON MISSED WORK

a) Missed Midterm Examination:

If you do not write the midterm, documentation must be e-mailed or given to your Instructor. Doctor's notes are always acceptable, but not required. If a valid excuse is received, the percentage value of the midterm will be added to the percentage value of the final exam. Otherwise, a grade of zero will be assigned. No make-up midterm examination will be given.

b) Missed Final Examination:

If you miss a final exam, contact your Program Counsellor as soon as possible (for the list of Program Counsellors see *www.uoguelph.ca/uaic/programcounsellors*). Official documentation is required within **five working days** of the missed examination. Consult the Undergraduate Calendar: *https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml*

c) **Other Missed Work** (with the exception of missed "wet" labs – see section 2 e)

Contact R. de Laat via your University of Guelph e-mail account, including your full name and student ID#. If a valid excuse is received, your work will be re-evaluated. Otherwise, a grade of zero is assigned. See the Undergraduate Calendar for information on regulations and procedures for Academic Consideration: https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

5. EQUAL OPPORTUNITY AND EVALUATION POLICY

The University is committed to academic integrity and has high ethical and moral standards. All students will be treated equally and evaluated using the criteria presented in this outline. Evaluation criteria are based strictly on achievement and not effort. There is no extra work for extra credit or to "make up" a grade. The need to obtain a higher grade for various reasons is not grounds for increasing your grade. If your grade were to be "bumped" (i.e. gave you a grade that you did not legitimately earn), it would be unfair to all the other students in the course.

6. COURSE RESOURCES

(a) **CHEM*1050 Website -** access through portal *http://www.uoguelph.ca/courselink/*

Your **Username** is the part of your University of Guelph e-mail address before the "@" sign. Your **password** is the same as your University e-mail. The course website provides a wealth of resources, practice quizzes and a discussion board to post your course questions. Weekly announcements are posted under "*News*". It is your responsibility to check this site on a regular basis.

(b) Your Instructor

Your instructor will be available at certain times for consultation and assistance. Office hours will be arranged at the first class meeting and posted on CourseLink.

- (c) Chemistry Learning Centre (3rd Floor Library Science Commons LIB 360) Chemistry Graduate Teaching Assistants (TAs) are available to answer questions and assist you with the lecture and laboratory material. Hours are posted on the course website under "*News*".
- (d) Supported Learning Groups (SLGs) www.lib.uoguelph.ca/get-assistance/studying/slgs SLGs are regularly scheduled small group study sessions. Attendance is voluntary and open to all students enrolled in the course. SLGs are facilitated by successful students who have recently completed the course. SLG leaders attend all lectures and work with faculty and staff to create study activities that integrate course content with effective approaches to learning. They are <u>not</u> tutors. The peer-supported group study format exposes students to various approaches to learning, problem solving, and exam preparation. Session time(s), location(s) and further information are available on the SLG website.

Weeks/Dates	Topics	Textbook
Weeks 1 - 5 Sept. 6 - Oct. 12	Energy, Heat, Enthalpy, Work, Thermochemical Equations, Calorimetry, Hess's Law, Standard Enthalpies of Formation. Bond Enthalpies, Ionic Compounds Entropy, Free Energy, Thermodynamics and Equilibrium. Bioenergetics.	Sections 6.1 - 6.9 Section 18.1 Sections 9.1 and 9.11 Sections 18.2 - 18.7
Wed. Oct. 17 in class	Test 1. Thermochemistry and thermodynamics	
Week 6 - 9 Oct. 15 – Nov. 9	Redox processes, half-reactions, balancing redox reactions. Voltaic Cells, Cell notation, Electromotive Force, Standard Cell Potentials, Standard Electrode Potentials, Equilibrium Constants from Cell Potentials, the Nernst Equation, Commercial Cells, Electrolysis	Section 19.1- 19.11
Wed. Nov, 14 in class	Test 2. Mostly Electrochemistry (maybe some thermo).	
Weeks 10 - 12 Nov. 12 – Nov. 30	Reaction Rates, Experimental Kinetics, Rate and Concentration, rate Laws, Temperature and rate, Arrhenius Equation, Reaction Mechanisms, Catalysis. Radioactive Decay	Sections 13.1 - 13.9 Section 20.4
Wednesday Dec. 5	Final Examination. Covers all course material	

7. LECTURE SCHEDULE

8. END of CHAPTER PROBLEMS

Problems are assigned to reinforce the principles covered in lectures, to help you to develop problem-solving skills, and to check your own knowledge. Work done on the problems is not graded, but there is a good correlation between mastering the problems on a week-by-week basis and performance in the course as a whole.

Work the problems in the week that the material is covered in lectures.

A common reason why students fail first year Chemistry is that they fall so far behind with the material that they never catch up. Lectures become harder to comprehend without the reinforcement of constant practice.

Work the problems first, then look at the solutions. Working from the solutions is not useful for learning.

Solutions to problems

The detailed solutions to the problems are in the Student Solutions Manual. Several copies of the Student Solutions Manual will be on two-hour reserve in the library along with several copies of the text.

Topic I: Thermodynamics. Weeks 1 to 5.

6.35, 6.37, 6.41, 6.53, 6.55, 6.59, 6.61, 6.67, 6.69, 6.79, 6.81, 6.85, 6.99, 6.103, 6.115, 6.117, 6.155, 9.85, 9.107, 9.109, 18.23, 18.25, 18.27, 18.29, 18.31, 18.35, 18.39, 18.43, 18.45, 18.55, 18.61, 18.65, 18.69, 18.73, 18.75, 18.83, 18.85, 18.89, 18.97, 18.108, 18.121.

Topic II: Electrochemistry. Weeks 6 to 9.

19.39, 19.41, 19.101 19.25, 19.33, 19.43, 19.45, 19.47, 19.51, 19.53, 19.55, 19.59, 19.61,19.63, 19.67, 19.71, 19.75, 19.79, 19.83, 19.85, 19.87, 19.91, 19.93, 19.95, 19.105, 19.111, 19.113, 19.117, 19.119, 19.123, 19.141.

Topic III: Chemical Kinetics. Weeks 10 to 12:

13.31, 13.33, 13.41, 13.45, 13.49, 13.53, 13.55, 13.57, 13.59, 13.63, 13.69, 13.71, 13.75, 13.79, 13.81, 13.85, 13.99, 13.101, 13.105, 13.107, 13.117, 13.119, 13.125, 13.143. 20.27, 20.61, 20.63, 20.67, 20.75.

9. LEARNING OBJECTIVES General Chemistry 10th Edition - Ebbing and Gammon See CoureLink website *Contents>>Lecture Resources>>CHEM1050 Readings and Schedule*

10. LEARNING OUTCOMES

On successful completion of this course, students should be able to:

- 1. Understand and demonstrate knowledge of the four laws of classical thermodynamics, including interpreting equations, formulas and concepts related to these laws.
- 2. Understand and apply the concepts of chemical equilibrium and electrochemistry to solve both qualitative and quantitative problems.
- 3. Demonstrate knowledge and understanding of reaction rates and the conditions that influence them.
- 4. Perform laboratory experiments demonstrating safe and proper use of standard chemical glassware and equipment.
- 5. Record, graph, chart and interpret data obtained from experiments through working co-operatively with others or independently.

11. UNIVERSITY POLICIES & INFORMATION

- a) Academic Advisors If you are concerned about any aspect of your academic program, make an appointment with a Program Counsellor within your degree program. For contact info, please refer to: *https://www.uoguelph.ca/uaic/programcounsellors*
- b) Academic Assistance If you are struggling to succeed academically, the Learning Commons (*https://www.lib.uoguelph.ca/*) offers numerous academic resources, including workshops related to time

management, taking multiple choice exams and general study skills. You can also set up individualized appointments with a learning specialist.

- c) Academic Misconduct Policy –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. 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 verifying the 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 their Instructor. The Academic Misconduct Policy is detailed in the Undergraduate Calendar: *https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml*
- d) Accessibility The University promotes the full participation of students who experience disabilities in their academic programs. To that end, academic accommodations are a shared responsibility between the University and the student. When accommodations are needed, students are required to register with Student Accessibility Services (SAS). Documentation substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway. Accommodations are available for both permanent and temporary disabilities. Common illnesses, such as a cold or the flu, do not constitute a disability. Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day (Nov. 2). More information: www.uoguelph.ca/sas
- e) **Copies of out-of-class assignments** Keep paper and/or other reliable back-up copies of all out-ofclass assignments: you may be asked to resubmit work at any time.
- f) **Copyright of Course Materials** All course materials are copyrighted by the Department of Chemistry, the instructor who prepared the materials or the publisher who provided the materials. These materials can only be reproduced with permission and in conjunction with associated copyright rules.

<u>Note</u>: Lectures **cannot** be recorded or copied without the permission of the presenter. Material recorded with permission is restricted to personal use for that course, unless further permission is granted.

- g) **E-mail Communication** As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.
- h) Use of Personal Information Personal information is used by University officials to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes. The University of Guelph's policy on the Collection, Use and Disclosure of Personal Information can be found in the Undergraduate Calendar: https://www.uoguelph.ca/registrar/calendars/undergraduate/current/intro/index.shtml
- i) **Resources** Academic Calendars provide information about the University of Guelph's procedures, policies and regulations: *www.uoguelph.ca/registrar/calendars/index.cfm?index*
 - i. **Drop Date**: The last date to drop one-semester courses, without academic penalty, is **Friday**, **Nov. 2**. Evaluate your performance regularly and if you are not doing well, seek advice from your Instructor prior to this date. Regulations and procedures for dropping courses are listed in the Undergraduate Calendar: https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml
 - ii. Schedule of Dates: www.uoguelph.ca/registrar/calendars/undergraduate/current/c03/index.shtml
 e.g., Thurs., Nov. 29 classes rescheduled from Tue., Oct. 9; Tuesday schedule in effect
 Fri., Nov. 30 classes rescheduled from Mon., Oct. 8; Monday schedule in effect.
- j) Wellness If you are struggling with personal or health issues:
 - **Counselling Services** (*https://wellness.uoguelph.ca/counselling/*) offers individualized appointments to help students work through personal struggles that may be impacting their academic performance.
 - Student Health Services (https://wellness.uoguelph.ca/health/) provides medical attention.
 - For support related to stress and anxiety, besides Health Services and Counselling Services, Kathy Somers runs training workshops and one-on-one sessions related to stress management and high performance situations (*http://www.selfregulationskills.ca/*)