



COURSE OUTLINE FOR REMOTE LEARNING

1. **Course:** CHEM 203, General Chemistry: Change and Equilibrium - Spring 2020

Lecture 01: F 14:00 - 14:50 - Online and W 14:00 - 15:50 - Online

Instructor	Email	Phone	Office	Hours
Dr. Roxanne Jackson	rjackson@ucalgary.ca	403 220-8797	SA 258	Please see D2L

Remote Learning Supplemental Information:

Some aspects of this course are being offered in real-time via scheduled meeting times. For those aspects you are required to be online at the same time. Please refer to the details below for more complete information.

Remote Learning Details:

Lecture videos will be posted for Monday mornings for students to watch and take notes on. There will be TopHat homework associated with these lectures to assess class understanding.

The entire class will meet via Zoom on Wednesdays from 2-3:50 pm and on Fridays from 2-2:50 pm beginning on May 6th, 2020. Recordings of these classes will be made and available for review on d2L. When appropriate, students will work in unstructured groups (using Breakout Rooms) and TopHat will be used to formatively assess class understanding.

Students will also meet via Zoom for structured tutorials and lab as scheduled in their Student Center beginning May 12th, 2020. These smaller group activities will not be recorded.

- Tutorial work to be graded will be submitted at the end of the tutorial period. There are five tutorials, each worth 5% of the students overall grade.
- Lab work will be submitted 24 hours after the end of the lab period. There are five labs, each worth 5% of the students overall grade.

Course Site:

D2L: CHEM 203 L01-(Spring 2020)-General Chemistry: Change and Equilibrium

Note: Students must use their U of C account for all course correspondence.

Structured Groupwork for the **Tutorials and Labs** begin the week of May 11th, 2020.

Activities will occur weekly. See the calendar in the course syllabus for the weekly schedule and your Student Center for the exact time your Zoom Meetings will take place.

2. **Requisites:**

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

Prerequisite(s):

Chemistry 30 (or Continuing Education - Chemistry 2) and one of Mathematics 30-1 or Mathematics 2 (offered by Continuing Education).

Antirequisite(s):

Credit for Chemistry 203 and any of 209, 213 or 301 will not be allowed.

3. **Grading:**

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Date
Online Quiz #1	10%	Due May 17, 2020 11:59 pm
Online Quiz #2	10%	Due May 31, 2020 11:59 pm
Online Quiz #2	10%	Due June 14, 2020 11:59 pm
Lab Activities	25%	Lab work will be due 24 hours after the end of each lab period. Please see d2L for more details.
Tutorial Activities	25%	Tutorial work will be due at the end of each tutorial period. Please see d2L for more details.
Final Exam	20%	To be scheduled by the registrar. You will be given a 24 hour period to write a two-part exam. One portion will be a three hour timed section. For example, if the registrar schedules your exam from 12-3 pm on June 20, 2020, your exam must be submitted no later than 3 pm on June 20, 2020 to be graded. You will, however, have a 24 hour window prior to this submission time, in which you may open and begin the exam. Once you have opened the timed portion you will have 3 hours to submit it. You will have the entire 24 hours for the untimed portion.

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
Minimum % Required	95 %	87 %	82 %	77%	72%	66 %	62 %	58%	54%	50 %	45 %

This course has a registrar scheduled final exam.

4. Missed Components Of Term Work:

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

5. Scheduled Out-of-Class Activities:

There are no scheduled out of class activities for this course.

6. Course Materials:

Recommended Textbook(s):

Flowers, Theopold, Langley, Robinson, et al., *Chemistry: Open Stax*: Open Stax.

Important Note about your textbook:

- Our recommended textbook is an open-educational resource, freely available online through the OpenStax website (OpenStax Chemistry: <https://openstax.org/details/books/chemistry>) and within d2L. You are welcome to 1) refer to the text online (website or d2L), 2) download the pdf to your own device.

Recommended Resource, so instructor can monitor class progress:

- TopHat: In addition, students are strongly encouraged to participate in the use of TopHat during Wednesday's Zoom class and with for the TopHat homework assignments for the Video Lectures (using cell phone, tablet or laptop). Access to TopHat is free for registered students. Details regarding registration of TopHat can be found in d2L.

Other Required/recommended course materials:

- A nonprogrammable scientific calculator (Casio FX 260 or equivalent)

7. Examination Policy:

Special Needs Students Must be registered with the Student Accessibility Services (see Section 12f. below), and must identify themselves to the instructor as soon as possible.

The online assessments are all open book exams to be completed individually. Online Quizzes 1-3, should take a student no more than an hour to complete (students will be given two hours), whereas the timed portion of the final exam should take no more than 1 hour (however students will be given three hours). These timed portions may be started and completed anytime within a 24 hour to account for the possibility of poor internet connections. The second part of the final exam will be available for the whole 24 hour time period. **The online assessments may consist of any combination of a d2L quiz or long answer worksheet to submitted (as a scanned file, word document or pdf document) to a d2L dropbox for grading.**

Students should also read the Calendar, [Section G](#), on Examinations.

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8. Approved Mandatory And Optional Course Supplemental Fees:

There are no mandatory or optional course supplemental fees for this course.

9. Writing Across The Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section [E.2](#) of the University Calendar.

10. Human Studies Statement:

If you agree, your course work may be used for research purposes. Your responses will remain anonymous and confidential. Grouped data (no individual responses) may be used in academic presentations and publications. Participation in such research is voluntary and will not influence grades in this course. Students' signed consent forms will be withheld from instructors until after final grades are submitted. More information will be provided at the time student participation is requested.

See also [Section E.5](#) of the University Calendar.

11. Reappraisal Of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

- a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **ten business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections [I.1](#) and [I.2](#) of the University Calendar
- b. **Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

12. Other Important Information For Students:

- a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).
- b. **SU Wellness Center:** For more information, see www.ucalgary.ca/wellnesscentre or call [403-210-9355](tel:403-210-9355).
- c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached

by email (syva@ucalgary.ca) or phone at 403-220-2208. The complete University of Calgary policy on sexual violence can be viewed at (<https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>)

- d. **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct may include: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a report. **These are only examples.**
- e. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head of the Department of Chemistry, Dr. Farideh Jalilehvand by email ahugchem@ucalgary.ca or phone 403-220-5353. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See [Section E.4](#) of the University Calendar.

- f. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](#) website.
- g. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](tel:403-220-3911) Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: [403-220-3913](tel:403-220-3913) Email: sciencerep@su.ucalgary.ca. [Student Ombudsman](#), Email: ombuds@ucalgary.ca.
- h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.
- i. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or [non-academic misconduct](#), in addition to any other remedies available at law.

Course Outcomes:

- Use the kinetic molecular theory for ideal gases as a model to explain relationships between temperature, kinetic energy, and reactivity
- Apply principles of chemical equilibria to predict the extent of aqueous chemical changes, including acid/base reactions, dissociation of ionic species, and redox reactions in electrochemical cells
- Identify factors that affect reaction rate, depict reaction rate with graphs and symbols, and explain rates at the molecular level
- Identify the thermodynamic enthalpy and entropy changes associated with a chemical reaction to determine which chemical reactions may or may not occur spontaneously, and describe how to alter that spontaneity.
- Use chemical equations and empirical measurements to solve quantitative problems relating to kinetic, thermodynamic and equilibrium principles
- Communicate the results of chemical changes in terms of observable macroscopic outcomes, molecular-scale models/representations, and mathematical equations. Communicate experimental results with appropriate precision of language and measurement.

Electronically Approved - Apr 30 2020 08:35

Department Approval

Electronically Approved - May 04 2020 09:49

Associate Dean's Approval for arrangements for remote learning