



COURSE OUTLINE FOR REMOTE LEARNING

1. **Course:** CHEM 201, General Chemistry: Structure and Bonding - Spring 2020

Lecture 01: MWF 12:00 - 13:50 - Online

Instructor	Email	Phone	Office	Hours
Dr Vivian Mozol	vjmozol@ucalgary.ca	TBA	SA 144E	TBA

Remote Learning Supplemental Information:

This course is being offered online in real-time via scheduled meeting times, you are required to be online at the same time. Please refer to the details below for more complete information.

Remote Learning Details:

Course Coordinator: Dr. Vivian Mozol (vjmozol@ucalgary.ca)

The learning outcomes for the course will be delivered synchronously:

The entire class will meet via Zoom on Wednesdays 12-1:25pm and Fridays 1-2pm beginning May 6th, 2020.

Recordings of these classes will be made and posted for review within 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 groupwork (tutorials) and lab activities as scheduled in their Student Center beginning May 11th, 2020. These smaller group activities will not be recorded.

- Tutorial work will be submitted the same day and graded for participation and feedback, which students may use to help them complete the weekly graded online assignments (80% of the course grade). Please note that the Tutorial scheduled on the Victoria Day Monday will be moved to Friday May 22nd, 2020 between 1-2pm.
- Lab work will be submitted same day, and makes up the remaining 20% of the course grade. There are five lab activities worth 4% each.

Course Site:

D2L: CHEM 201 L01-(Spring 2020)-General Chemistry: Structure and Bonding

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

Structured Groupwork for the Tutorials and Lab Activities: begin the week of May 11th, 2020

(Activities will occur weekly. See calendar in the course syllabus for the weekly schedule & your student centre for the exact time your Zoom meeting 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 201 and any of 209, 211 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 Assignment 1	5%	Due May 16th, 2020
Online Assignment 2	15%	Due May 30th, 2020
Online Assignment 3	20%	Due June 6th, 2020
Online Assignment 4	20%	Due June 13th, 2020
Lab Activities	20%	Lab work and a D2L post-quiz will be due 48 hours after each activity. Details are posted in D2L.
Final Online Assignment	20%	To be scheduled by the registrar. 3 hr exam, given 24 hour window. For example, if the registrar schedules your exam from 2-4pm on June 20, 2020, your exam must be submitted no later than 4pm 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 exam you will have 3 hours to submit it. During the 24 hour window someone will be available for questions.

NB: Tutorial activities are graded for participation and feedback.

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	95.00 %	87.00 %	82.00 %	77.00%	72.00%	66.00 %	62.00 %	58.00%	54.00%	50.00 %	45.00 %

This course has a registrar scheduled final exam.

In order to achieve the prerequisite requirements (i.e. C-) for future Science courses, a student must meet

ALL of the following requirements:

- 1) Achieve a minimum 50% weighted average for all the online assignments (#'s 1-4 and the final)
- 2) Achieve a minimum grade of 50% for the laboratory component of the course and
- 3) Achieve a participatory grade for 3 of the 5 structured group work (tutorial) activities occurring Monday or Tuesday via Zoom.

Therefore, if **ANY** of the above three are not met a maximum grade of D+ will result.

4. Missed Components Of Term Work:

The University has suspended requirements for students to provide evidence for reasons for absences so please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations. 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.

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 your 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 ([see Section E.3](#)).

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 text is an open-educational resource, freely available online through the OpenStax website (OpenStax Chemistry: <https://openstax.org/details/books/chemistry>) & 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 recommended to participate in the use of Tophat during Wednesdays Zoom class (using their cell phone, tablet, or laptop). Access to Top Hat is free for registered students. Details regarding registration of Tophat can be found in D2L.

Other REQUIRED/recommended Course Materials

- A Model Kit is recommended but not required. (Molymod kits are suggested)
- A non-programmable scientific calculator (Casio FX 260 or equivalent)

7. Examination Policy:

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

The Online Assignments are all Open Book Exams to be completed individually. Online Assignments 1-4 should take a student no more than 2-hours to complete, whereas the final online assignment may take up to 3 hours. As for online work there is the possibility of the internet cutting out, students are being given a 24 hour window in which to start and then complete any online assessment. **Assessments will consist of any combination of an online D2L quiz or long answer worksheet to be submitted (as a scanned image, doc file or pdf file) through D2L for grading.**

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

8. Approved Mandatory And Optional Course Supplemental Fees:

Not applicable.

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.

- 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 (svsa@ucalgary.ca) or phone at [403-220-2208](tel: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](tel: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.

13. In addition to the Lecture component of the course, students are scheduled for weekly **tutorial** and **lab activities**. You must attend your assigned tutorial or laboratory time slot unless you have been given written permission by the course coordinator.

- **Lab Activities:** Laboratory activities will begin the week of May 11th, 2020. These activities will occur via Zoom. There are five activities each worth 4% of your final grade. Details for each activity will be posted in D2L the week prior to the activity. As the lab format has changed from previous years students who are repeating the course may not use their previous lab grade as a replacement.
- **Tutorial Structured Groupwork:** Tutorial activities will begin the week of May 11th, 2020. These activities will occur via Zoom. These activities have a participatory grade associated with them and students must complete 3 of the 5 activities to achieve the participatory grade (and therefore be eligible for a pre-requisite pass for the course). Details of each activity is posted in D2L.

Course Outcomes:

- **OBSERVATION/ANALYSIS:** Collect and analyze observations related to experiential chemical activities.
- **ATOMS;** Use the quantum theory description of the energy and spatial distribution of electrons to correlate the physical properties of atoms with how atoms interact
- **CHEMICAL SPECIES;** Generate Lewis & VSEPR diagrams and use bonding theories to describe and evaluate the connectivity between atoms and spatial arrangement of bonding in a chemical species
- **COLLECTIONS OF CHEMICAL SPECIES;** Identify the charge distribution in a chemical species and use it to illustrate how collections of chemical species will interact with each other physically and chemically.

Electronically Approved - Apr 23 2020 14:20

Department Approval

Electronically Approved - Apr 24 2020 11:06

Associate Dean's Approval for arrangements for remote learning