COURSE OUTLINE

1. Course: CHEM 212, Chemical Ways of Thinking - Fall 2023

Lecture 01: TR 12:30 - 13:45 in ENG 401

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Katelynn Daly</td>
<td><a href="mailto:katelynn.daly@ucalgary.ca">katelynn.daly@ucalgary.ca</a></td>
<td>(email preferred)</td>
<td>TBA</td>
<td>by appointment</td>
</tr>
</tbody>
</table>

Office hours are by appointment. Send an email to katelynn.daly@ucalgary.ca

To account for any necessary transition to remote learning for the current semester, courses with in-person lectures, labs, or tutorials may be shifted to remote delivery for a certain period of time. In addition, adjustments may be made to the modality and format of assessments and deadlines, as well as to other course components and/or requirements, so that all coursework tasks are in line with the necessary and evolving health precautions for all involved (students and staff).

In Person Delivery Details:

Tutorials are in-person workshops. Attendance is expected and will be held in the classroom on Wednesdays from 1-1:50pm. During each workshop, students will be working in groups to review and apply the course content. Tutorial materials will be available on D2L at least one week prior to the tutorial.

Tutorial workshops will be assessed individually with assessments submitted in-class by the end of the tutorial section.

For email correspondence, to help me reply faster please put “CHEM 212” in the subject line.

Course Site:

D2L: CHEM 212 L01-(Fall 2023)-Chemical Ways of Thinking

To avoid IT problems, it is recommended that the students use their U of C account for all course correspondence. Please include ‘CHEM 212’ in the subject line of your email.

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

Equity Diversity & Inclusion:

The University of Calgary is committed to creating an equitable, diverse and inclusive campus, and condemns harm and discrimination of any form. We value all persons regardless of their race, gender, ethnicity, age, LGBTQIA2S+ identity and expression, disability, religion, spirituality, and socioeconomic status. The Faculty of Science strives to extend these values in every aspect of our courses, research, and teachings to better promote academic excellence and foster belonging for all.

The Chemistry EDI Committee acknowledges there are persistent barriers that prevent such accessibility and hinder our progress towards EDI. Our representatives (faculty, postdocs, graduate and undergraduate students) are committed to addressing any concerns and work towards proactive solutions that enact necessary change within the department. To submit anonymous questions, comments or concerns regarding EDI related issues, please reach out to our Associate Head EDI, Belinda Heyne (bjmheyne@ucalgary.ca)

2. Requisites:

See section 3.5.C in the Faculty of Science section of the online Calendar.

Prerequisite(s):
Chemistry 20 and admission to an Indigenous Pathway program.

Antirequisite(s):
Credit for Chemistry 212 and Engineering Foundations 121 will not be allowed.

Note(s):
- Completion of this course meets the University of Calgary's Chemistry 30 requirement. Not included in the Field of Chemistry.
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:

<table>
<thead>
<tr>
<th>Course Component</th>
<th>Weight</th>
<th>Due Date (duration for exams)</th>
<th>Modality for exams</th>
<th>Location for exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial Worksheets¹</td>
<td>15%</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class Quiz - Participation²</td>
<td>10%</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midterms³</td>
<td>30%</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assignment - Paper</td>
<td>10%</td>
<td>Nov 03 2023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assignment - Presentation</td>
<td>10%</td>
<td>Dec 05 2023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registrar Scheduled Final Exam</td>
<td>25%</td>
<td>Will be available when the final exam schedule is released by the Registrar</td>
<td>in person</td>
<td>Will be available when the final exam schedule is released by the Registrar</td>
</tr>
</tbody>
</table>

¹ Tutorial worksheets completed within scheduled tutorial time. Equal grade weighting given to all tutorial worksheets.
² 10 quizzes during Thursdays lecture section. Participation marks only.
³ There will be 3 midterms held in-class during the scheduled lecture time, held on September 28th, October 24th and November 21st. The worst midterm grade of the 3 will be dropped, with only the highest scoring 2 midterms counting towards the final grade at 15% each. Students are expected to write all 3 midterms.

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.

<table>
<thead>
<tr>
<th>Minimum % Required</th>
<th>A+</th>
<th>A-</th>
<th>B+</th>
<th>B-</th>
<th>C+</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>95 %</td>
<td>90 %</td>
<td>85 %</td>
<td>80%</td>
<td>75%</td>
<td>70 %</td>
<td>65 %</td>
<td>60%</td>
</tr>
</tbody>
</table>

This course will have a Registrar Scheduled Final exam that will be delivered in-person and on campus. The Final Examination Schedule will be published by the Registrar’s Office approximately one month after the start of the term. The final exam for this course will be designed to be completed within 2 hours.

In order to achieve the prerequisite requirements (i.e., C-), a student must meet all of the following requirements:

1. Attend and submit worksheets for 7 out of 10 tutorials.
2. Achieve a minimum of 50% in the tutorial worksheet components.
3. Achieve a minimum of 50% of the weighted average on the examinations (Midterm and Final).

The University of Calgary offers a flexible grade option, Credit Granted (CG) to support student’s breadth of learning and student wellness. Faculty units may have additional requirements or restrictions for the use of the CG grade at the faculty, degree or program level. To see the full list of Faculty of Science courses where CG is not eligible, please visit the following website: [https://science.ucalgary.ca/current-students/undergraduate/program-advising/flexible-grading-option-cg-grade](https://science.ucalgary.ca/current-students/undergraduate/program-advising/flexible-grading-option-cg-grade)

4. **Missed Components Of Term Work:**

In the event that a student legitimately fails to submit any online or in-person assessment on time (e.g. due to illness, domestic affliction, etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date, or possible exemption and reweighing of components. Absences not reported within 48 hours will not be accommodated. Students may be asked to provide supporting documentation (Section M.1) for an excused absence, See FAQ.

If an excused absence is approved, options for how the missed assessment is dealt with is at the discretion of the coordinator or course instructor. Some options such as an exemption and pro-rating among the components of the course may not be a viable option based on the design of this course.
If a group assessment (such as a written work or oral presentation) is missed due to illness or extenuating circumstances, contact the course instructor within 48 hours of the missed assessment to discuss your situation. Arrangements will be made on a case-by-case basis.

5. **Scheduled Out-of-Class Activities:**

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

6. **Course Materials:**

The Department of Chemistry’s own online Textbook: https://wpsites.ucalgary.ca/chem-textbook/

A non-programmable calculator is required (such as Casio FX 260 or equivalent).

*Top Hat* will be used periodically during the semester for in-class practice problems as well as during the workshops to gather student feedback. Participation is optional but highly recommended. Access to Top Hat is free for University of Calgary students. More details will be provided on the D2L course website.

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Stable internet connection.

For more information please refer to the UofC [ELearning](https://www.ucalgary.ca/edc) online website.

7. **Examination Policy:**

There are four exams in this course: three midterms and a final exam.

The three midterms are not cumulative – a detailed outline of content included in each exam will be posted to D2L approximately one week before the exam.

The final exam is cumulative and will include all lecture content of the course (including readings, suggested text questions, tutorial activities, etc.).

Exams are closed book and written in-person. A data/formula sheet to the exam will be provided. Details on the content and format of these sheets will be on the course D2L.

No aids are allowed on tests or examinations, aside from non-programmable calculators.

All examinations are to be completed individually by the student submitting the exam.

Please read the instructions for each assignment carefully to determine what resources are allowed.

Any student with academic accommodations must be registered with Student Accessibility Services (see Section 12(e) below) and have reviewed their accommodations as described on the SAS documents with the course coordinator within the first 15 days of the semester or at least 10 business days before any scheduled activity for which accommodations are required.

Students should also read the Calendar, Section G, on Examinations.

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:**

Students will not participate as subjects or researchers in human studies.

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 Services:** For more information, see their website or call 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. The complete University of Calgary policy on sexual violence can be viewed here.

   d. **Student Ombuds Office:** A safe place for all students of the University of Calgary to discuss student related issues, interpersonal conflict, academic and non-academic concerns, and many other problems.

   e. **Student Union Information:** SU contact. Email your SU Science Reps: science1@su.ucalgary.ca, science2@su.ucalgary.ca, science3@su.ucalgary.ca.

   f. **Academic Accommodation Policy:**

   It is the student’s responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf

   Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf.

   Students needing an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, by filling out the Request for Academic Accommodation Form and sending it to Associate Head, Undergraduate by email ahuuchem@ucalgary.ca preferably 10 business days before the due date of an assessment or scheduled absence.

   g. **Misconduct:** Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional Code of Conduct and promote academic integrity in upholding the University of Calgary’s reputation of excellence. Some examples of academic misconduct include but are not limited to: posting course material to online platforms or file sharing without the course instructor’s consent; submitting or presenting work as if it were the student’s own work; submitting or presenting work in one course which has also been submitted in another course without the instructor’s permission; borrowing experimental values from others without the instructor’s approval; falsification/fabrication of experimental values in a report. Please read the following to inform yourself more
on academic integrity:

Student Handbook on Academic Integrity
Student Academic Misconduct Policy and Procedure
Faculty of Science Academic Misconduct Process
Research Integrity Policy

Additional information is available on the Student Success Centre Academic Integrity page

h. **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.

i. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). 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.

j. **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.

13. **Tutorial Information**

Tutorial sessions will begin September 13th. Room locations and times can be found via your Student Centre. The tutorial worksheets can be found online (course D2L site). You must review relevant course material prior to attending your scheduled tutorial sessions, print out the worksheet before attending.