COURSE OUTLINE

1. **Course**: CHEM 357, Industrial Organic Chemistry for Engineers - Winter 2024

   Lecture 01: MWF 10:00 - 10:50 in ICT 122

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<thead>
<tr>
<th>Instructor</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Dr Ashley Causton</td>
<td><a href="mailto:acauston@ucalgary.ca">acauston@ucalgary.ca</a></td>
<td>403 210-3968</td>
<td>SA 144A</td>
<td>TBA</td>
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   Tutorials are in SA 204 beginning on Monday January 15th. See the course D2L site for scheduling.

   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:**

   **Lectures** will be delivered during scheduled class time (MWF 10am in ICT 122).

   **Tutorials** will occur in person in SA204 starting Monday, January 15th, 2024 during your scheduled tutorial time. Tutorial material will be broken into 5 modules and each module is based on a set of course topics as outlined in the tutorials section of the course website. Modules consist of practice and assignment weeks. Module coverage is cumulative. Assignments (50 min) take place in SA204 and are written under exam conditions.

   **Course Site:**

   D2L: CHEM 357 L01-(Winter 2024)-Industrial Organic Chemistry for Engineers

   **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 209 or Engineering 204; or Chemistry 201 or 211, and 203 or 213.

   **Antirequisite(s):**
   - Credit for Chemistry 357 and any of 351, 353 or 355 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:
There are no scheduled out of class activities for this course.

Scheduled Out-of-Class Activities:

- **legitimate reasons** (e.g. vacation), the score of that course component will be zero.
- If a student missed the midterm or tutorial assignment for non-shifted to the final examination; for coursework assignment this will be pro-rated among the remaining components of the considered coordinator within provided with any original documentation (not an electronic copy).
- Illness (e.g. varsity sports or academic conferences) then appropriate documentation is required. The course coordinator must be
- Absences must be reported within 48 hours will not be dealt with the lowest non-zero tutorial quiz score at the end of term.
- A grade of D+ or below will result if a student scores below 50% on the final examination, or a minimum 50% weighted average on the examinations (Two Midterm exams and Final exam).
- The coursework mark is based five equally weighted quizzes. A classroom participation score based on participation during in-class Top Hat questions may be used to replace the lowest non-zero tutorial quiz score at the end of term.
- The documentation must be provided to the course instructor if this course does not have a coordinator to
- 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
- There are five equally weighted tutorial quizzes (worth 4% each). These are online quizzes to be completed during your scheduled tutorial period (12pm in SA204 on either Tuesday, or Wednesday, or Friday). You must provide student ID and sign in when completing these quizzes. The five quizzes happen in the weeks starting Jan 22, Feb 5, Feb 26, Mar 11, Apr 1.
- 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>95%</td>
<td>90%</td>
<td>85%</td>
<td>80%</td>
<td>75%</td>
<td>70%</td>
<td>65%</td>
<td>60%</td>
<td>55%</td>
</tr>
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Students will be expected to understand at every stage the material covered in all components of the course. In order to satisfy the prerequisite requirements (i.e., C-) for further Chemistry courses, a student must achieve either a minimum 50% on the Final examination, or a minimum 50% weighted average on the examinations (Two Midterm exams and Final exam).

The coursework mark is based five equally weighted quizzes. A classroom participation score based on participation during in-class Top Hat questions may be used to replace the lowest non-zero tutorial quiz score at the end of term.

A grade of D+ or below will result if a student scores below 50% on the final examination and also scores below 50% on the weighted average of the two midterm and final examinations.

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.

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

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 reweighting 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.

There are no deferred Midterm examinations or deferred coursework assignments.

Absences must be reported within 48 hrs. If a student misses the midterm or a coursework assignment for reasons other than illness (e.g. varsity sports or academic conferences) then appropriate documentation is required. The course coordinator must be provided with any original documentation (not an electronic copy). The documentation must be provided to the course coordinator within 15 days of the date of the midterm or coursework assignment in order for an excused absence to be considered. If an excused absence is approved, then the percentage weight of a legitimately missed midterm examination will be shifted to the final examination; for coursework assignment this will be pro-rated among the remaining components of the coursework. (see Section E.3 of the University Calendar). If a student missed the midterm or tutorial assignment for non-legitimate reasons (e.g. vacation), the score of that course component will be zero.

5. Scheduled Out-of-Class Activities:

There are no scheduled out of class activities for this course.
6. **Course Materials:**

**Suggested Course Materials:**

Any "Introduction to Organic Chemistry" textbook and accompanying study guide can be used to supplement your learning.

A Molecular Model Kit may help in visualizing three dimensional molecules.

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 E-Learning online website.

7. **Examination Policy:**

Model kits (in a clear container) are allowed during examinations.

No other aids are allowed; including data sheets, notes, electronic devices(e.g. calculators, phones, smartwatches, etc.).

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:**

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 withhold 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.
Course Outcomes:

- Develop an understanding of fundamental concepts of organic chemistry
- Understand how the properties of an organic material are linked to its structure