COURSE OUTLINE

1. **Course:** CHEM 599.21, Selected Topics in Chemistry - Fall 2020, Topic: Medicinal Chemistry
   
   Lecture 01: TR 09:30 - 10:45 - Online

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Darren Derksen</td>
<td><a href="mailto:dderksen@ucalgary.ca">dderksen@ucalgary.ca</a></td>
<td>403 220-2610</td>
<td>SB 233</td>
<td>By Zoom appointment</td>
</tr>
</tbody>
</table>

   **Online Delivery Details:**

   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.

   As this course has moved to fully online learning, the course will be a hybrid of pre-recorded asynchronous lectures as well as synchronous discussion/TopHat quizzes/zoom discussions during regularly scheduled lecture time. Students are expected to watch the lectures before the scheduled lecture time so they can participate in discussions during synchronous lectures. A schedule for the synchronous lecture times will be posted to D2L and updated at least a week in advance. Synchronous exams will be scheduled to use the entire Tuesday and/or Thursday lecture blocks.

   Tuesday synchronous lectures will typically be discussions to reinforce concepts learning from pre-recorded lectures (~15-30 minutes) followed by open question time.

   Thursday synchronous lectures will typically begin with a TopHat or similar format quiz (~5-15 minutes) followed by discussion to reinforce learning from pre-recorded lectures (~15-30 minutes).

   **Course Site:**

   D2L: CHEM 599.21 L01 - (Fall 2020) - Selected Topics in Chemistry

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

2. **Requisites:**

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

   **Prerequisite(s):**

   Consent of the Department. MAY BE REPEATED FOR CREDIT

   Prerequisites: CHEM 353, Consent of Department

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>Component(s)</th>
<th>Weighting %</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments/Quizzes</td>
<td>50%</td>
<td>See below</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>20%</td>
<td>See below</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
<td>Scheduled by the registrar</td>
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### Assignments/Quizzes 50%

- **Assign 1 - Literature Search** 5% (Due Sept. 17, 2020)
- **Assign 2 - New Synthetic Methods and Mechanisms Presentation** 10% (Due Oct. 1, 2020)
- **Assign 3 - Creativity Assignment** 10% (Due Nov. 19, 2020)
- **Assign 4 - Drug Paper** 15% (Due Dec. 8, 2020)
- **Quizzes (Synchronous)** 10% (Thursdays, Weekly)

**Midterm Exam** 20% 10% Oral exams Oct. 13 and Oct 15, 2020, 10% Written Exam (Synchronous)

Oct. 20, 2020

**Final Exam** 30% (Asynchronous, 24 hr to complete, exam end time scheduled by the registrar)

All graded components, except the creativity assignment, must be completed individually. For the creativity assignment, groups of 2 or 3 are allowed.

TopHat or similar format quiz (~5-15 minutes) should be expected at the beginning of every Thursday class aside from scheduled exam days.

All quizzes, midterm, and final exams are synchronous. For any synchronous assessment, time will be adjusted for SAS students if needed and accommodations for students will be done on a case-by-case basis. Any students requiring accommodations should inform the course instructor as soon as possible (before Sept 10, 2020).

Oral midterm exam - Schedule for the oral exam component will be completed via D2L with sign up time slots of 15 minutes available between Oct 13 and 15. Oral exams will be completed via zoom and will be approximately 10 minutes in length per person with a 5 minute buffer for technical issues. Practice oral exam sessions will be made available to familiarize students with the online exam format. A selection of time slots will be available both during and outside of synchronous class time. Scheduling will be completed no later than Sept 30.

Written midterm exam - Synchronous, 50 minute exam plus 25 minutes technical issue buffer

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>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>95 %</td>
<td>87 %</td>
<td>82 %</td>
<td>77 %</td>
<td>72 %</td>
<td>66 %</td>
<td>62 %</td>
<td>58 %</td>
<td>54 %</td>
<td>50 %</td>
<td>45 %</td>
<td></td>
</tr>
</tbody>
</table>

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, or the course instructor if this course does not have a 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:

Textbook is not required. Notes for the course will be provided from lectures via D2L
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 online website.

7. Examination Policy:

Midterm and Final exams - Course notes and any content posted by the instructor to D2L are allowed to be used for exams. Collaboration with other students or posting in online discussion forums or other communication methods is strictly prohibited and will result in academic misconduct investigations.

The midterm exam will be a combination or an oral examination component via zoom as well as a written component that will be submitted via D2L.

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.

As writing of reports, assignments, and exams is required for this course, it is essential that concepts are conveyed clearly and concisely. Marks will be removed from assignments with poor writing quality (grammar, spelling).

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 Center:** For more information, see [www.ucalgary.ca/wellnesscentre](http://www.ucalgary.ca/wellnesscentre) 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 at [https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf](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](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. Yuen-Ying Carpenter by email ahugchem@ucalgary.ca or phone 403-220-6908. 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 (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](http://www.ucalgary.ca) website.

g. **Student Union Information:** **VP Academic,** Phone: 403-220-3911 Email: suvpaca@ucalgary.ca. **SU Faculty Rep.,** Phone: 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:**
- Students will be able to identify and characterize major classes of natural product drugs
- Students will be able to propose reasonable syntheses of heterocycles and medium-sized target molecules
- Students will be able to use basic rules for predicting drug-like character of molecules
- Students will be able to interpret basic structure-activity relationship data
Department Approval