COURSE OUTLINE – Chem221/Organic Chemistry I
Updated-2

Important notes:
Delivery of lectures: in person
Evaluation: Term tests and final exam: in person

1. General Information

- Organic Chemistry I (CHEM 221) **Section 01**, 3 credits, Fall 2021
- **Lectures**: Tuesday & Thursday, 10:15 -11:30 AM, Loyola campus, **HC-155**
- **Office hours**: Tuesday and Thursday, 11:30 AM - 12:30 PM - **zoom**
- Dr. John Oh, Faculty of Arts & Science, Department of Chemistry & Biochemistry.
  Office: SP 275.09
- Course email: john.oh@concordia.ca. Please include your last name and ID number in any email message that you send. Please note that I do not reply to email sent to me through Moodle.
- Course web page available on Moodle (www.myconcordia.ca)
- Strategic Learning, collaborative study sessions, accompany this class -attendance is voluntary but strongly encouraged.
  Strategic Learning leaders: Izabella Blazonis
  SL Website: http://learning.concordia.ca

- *Course Format for CHEM 221:*
  Theory (in person class) and labs (in-person wet labs). Lecture materials (PowerPoint slides (.pdf)) and suggested problems (.pdf) for each lecture (or chapter) are available on the course Moodle page.

General comments on CHEM 221:
There is no unique method to study and learn organic chemistry. **I will use white boards for my lectures in most classes.** Lecture presentations will be placed in the course mooodle. They DO NOT fully replace the textbook but rather serve as a summary of many of the main points.

A good understanding of organic chemistry is not possible without TIME and PRACTICE. You are strongly encouraged to solve the problems on your own. Please note that there are many problems in the text and you are encouraged to work through as many as your schedule and motivation will allow. For best results, seriously try the problems without referring to the answers. It is very easy to convince yourself that you understand a topic if you look up the answer prematurely without testing your own abilities first. One of the main points of the course is for you to become competent in solving problems in organic chemistry, particularly those that you may not have seen before.

DO NOT FALL BEHIND IN UNDERSTANDING THE COURSE MATERIAL AND WORKING THROUGH THE PROBLEMS. The material cannot be learned the night before a test. There are many good internet resources available and several textbooks and study guides available in the library. *Furthermore, please feel free to come if you have any problems regarding the course material.*

2. Course Description

- Prerequisites: CHEM 205 & CHEM 206
- *Detailed Course Topics:*
    - **Electrons, Bonds and Molecular Properties**
    - **Molecular Representations**
    - **Acids & Bases**
    - **Alkanes**
    - **Cycloalkanes**
    - **Stereoisomerism**
    - **Alkyl halides & Nucleophilic Substitution**
    - **Alkenes & Elimination Reactions**
    - **Addition Reactions of Alkenes**
    - **Alkynes**
    - **Synthesis**

3. Objectives

Upon successful completion of CHEM 221, students should demonstrate an understanding of key concepts in organic chemistry including: bonding, structure and nomenclature, stereochemistry, organic chemical reactions and mechanisms. The student is expected to apply this knowledge towards solving problems in organic chemistry.

4. Schedule *(may be subject to change)*

Examinations:

- **Two term tests** during the classes (**Tue. October 12 & Thu. November 11**).
- **One lab exam** (The format will be announced).
- **Final exam** – Its date will be arranged by the Concordia University Examinations Office.
- If you miss an exam due to illness, you must provide a **written excuse** (signed by a doctor on the appropriate letterhead paper) during the next possible class.
- There are **no make-up exams.** It is your responsibility to take note of their time and date.

Laboratory information:

Laboratory performance is graded on the quality of the experimental work, the laboratory reports, pre-lab quizzes as well as on practical laboratory exam questions in the lab exam (incorporated in the final exam). Laboratory experiments might not be directly related to the lectures although they illustrate the theory of Organic Chemistry. Consider the laboratory work as an independent and additional learning experience. The laboratory coordinator is **Vincent Lau** (Vincent.lau@concordia.ca) and the Chemistry 221 laboratories are located in SP-116. Laboratories start the week of **September 13, 2021**. All students *must* attend the lab section for which they are registered – please refer to wet-lab(W) schedule posted on the CHEM 221 Lab Moodle page. Please note that for the three wet-labs where you will be on campus, you are required to wear a mask at all times in all public areas of the building.

If you are repeating the course and have passed the lab component **within the past two (2) years**, you may request a lab exemption. **The deadline for lab exemptions for the fall 2021 term is Friday, September 10, 2021 at noon.** Late applications will not be accepted. Signed and completed forms must be returned

to **Lisa Montesano** (elizabeth.montesano@concordia.ca). You **must** register for the appropriate lab exemption section (56); if you are registered in any other lab section, you will be required to complete the lab portion of the course. If you apply late or are denied exemption, you must repeat the lab portion. Partial exemptions will not be given, in particular, lab (reports) and lab exam are linked. If an exemption is granted, your previous lab mark (lab reports and lab exam) will be carried forward. A student who is denied a lab exemption must repeat the laboratory component of the course.

Course withdrawal: Students who wish to withdraw from a course must do so before the deadline: the **DNE (tuition refund) deadline is September 20, 2021 and the DISC deadline is November 8, 2021**. Students who withdraw from this course must *also check-out from their lab section.* A student who does not properly withdraw before the specified deadlines will receive a failing grade.

5. Course Materials

- **Recommended: Organic Chemistry 4th edition- David Klein**.
- Concordia CHEM 221 Organic Chemistry I Laboratory Manual and carbon-copy lab book (bookstore details to be announced)
- **Lab coats & safety glasses** are compulsory during the practical laboratories and are available from the Concordia University bookstore. Please note that for the three wet-labs where you will be on campus, you are required to wear a mask at all times in all public areas of the building.
- **Molecular models** help considerably in clarifying certain points on organic chemistry theory. They are permitted for exams and you are **strongly advised** to buy, borrow, or share a set.
- Optional: Other textbooks of Organic Chemistry I

6. Grading *(exam schedules may be subjected to change)*

The final grade of the course is based on the marks obtained in the examinations, quizzes, and the laboratory marks. The composition of the final grade is as follows:

Term tests:	30%
Final exam (arranged by the Examinations Office):	45%
Laboratory and prelab tests:	15%
Lab exam:	10%
TOTAL:	**100%**

Students have to pass the lecture material and lab component SEPARATELY-Minimum passing marks: 50% lecture (50% final exam) and 60% lab (within the lab mark the minimum passing grade for both the lab reports and the lab exam is 50%). You will receive an R (repeat) as course grade should your lab exam, lab reports, and their combination be below passing marks. **STUDENTS MUST PASS THE FINAL EXAM (>50%) TO PASS THE COURSE**. While a lecture grade of 50% is a passing grade, a grade below 60% indicates that you are missing much of the understanding of the material and overall competence for future work in the area would be in doubt. In general, grades above the 75% level indicate decent competence so that

success in future courses in organic chemistry can be expected. Grading scale: **0 F; 50.0 D-; 53 D; 57 D+; 60 C-; 63 C; 67 C+; 70 B-; 73 B; 77 B+; 80 A-; 85 A; 90 A+.**

Failing Grades: F: <50 (theory) or <50 (final exam); R: <40 (theory), <50 (lab exam), <50 (lab reports) or <60 (lab)

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

7. Rights and Responsibilities

Source: http://www.concordia.ca/students/academic-integrity.html

"CHEM 101": The Academic Code of Conduct: Ethical Use of Information Sources

MANDATORY QUIZ AND SEMINAR

As part of your CHEM course, you are ***required*** to i) attend a Chemistry and Biochemistry Departmental Seminar on the academic conduct code and the appropriate use of information sources and ii) pass the online quiz associated with this seminar (the passing grade for the quiz is 100%). (**Note:** this quiz is graded by the Department of Chemistry and Biochemistry, and you do not have access to it until after you have attended the seminar. Therefore, any other quiz you may have taken on the academic code of conduct does not count toward the CHEM 101 requirement.) The aim of this seminar and quiz is to clarify the academic conduct code in terms of which practices will be considered unacceptable with regards to work submitted for grading in your CHEM course. **You are only exempt from repeating the seminar and the quiz if you have done both in Fall 2016 or more recently,*** otherwise you are required to repeat both this term. This short seminar (1 hour) will be held at the following times (note that you will not be given credit if you join too late and/or leave too early):

Date (Fall 2021)	Time	Mode	Registration link
Sept. 22 (Wednesday)	21:00-22:00	Zoom	https://concordia-ca.zoom.us/meeting/register/tZIucumrqTouHdDujCve8eeyjRsM__6XiQUD
Sept. 23 (Thursday)	21:00-22:00	Zoom	https://concordia-ca.zoom.us/meeting/register/tZEsdeyupjIuGNdupvk7KE33YXJ6MyAak0An
Sept. 27 (Monday)	19:00-20:00	Zoom	https://concordia-ca.zoom.us/meeting/register/tZIud-urqTMiH91iodapd5geAi05rQtcR_y6

As space for each of the Zoom seminars is limited, please **register early** for your preferred slot (copy the corresponding link above into your browser, and make sure you do not introduce a space: it is "concordia-ca"). Then do not forget to **attend** that seminar slot on the date above!

We will take attendance at the Zoom seminar.

If you do not complete this course requirement, your final grade for the course may be

lowered by one full letter grade with an incomplete (INC) notation until such time as this requirement is completed. Please refer to the undergraduate calendar (section 16.3.5) for details on removal of an incomplete notation.

* You are exempt if you can locate your ID in the pdf file located on the Departmental web site (http://www.concordia.ca/content/dam/artsci/chemistry/docs/Compliance-list.pdf) and if there is no entry in the "quiz" column for you.

PLAGIARISM AND OTHER FORMS OF ACADEMIC DISHONESTY

The Academic Code of Conduct can be found in section 17.10 of the academic calendar (http://www.concordia.ca/academics/undergraduate/calendar/current/17-10.html). Any form of unauthorized collaboration, cheating, copying or plagiarism found in this course will be reported and the appropriate sanctions applied. The mandatory seminar is a clear and fair opportunity to learn what our faculty regards as academic misconduct. Failure to take part in this learning opportunity and thus ignorance of these regulations is no excuse and will not result in a reduced sanction in any case where academic misconduct is observed.

8. Improving Your Academic Experience

The University offers many services that can help students:

Concordia's COVID-19 updates
https://www.concordia.ca/coronavirus.html

Concordia Counseling and Development offers career services, psychological services, student learning services, *etc.* - *http://www.concordia.ca/students/counselling.html*

The Concordia Library Citation and Style Guides -
http://library.concordia.ca/help/howto/citations.html

Advocacy and Support Services - https://www.concordia.ca/offices/advocacy.html

Student Transition Centre -
http://stc.concordia.ca/

New Student Program -
http://newstudent.concordia.ca/

Students with Disabilities - *http://www.concordia.ca/students/accessibility.html*

Student Success Centre -
http://www.concordia.ca/students/success.html

Financial Aid & Awards -
http://www.concordia.ca/offices/faao.html

Health Services -
https://www.concordia.ca/students/health.html

Sexual Assault Resource Centre -
https://www.concordia.ca/students/sexual-assault.html