UNIVERSITY OF CALGARY
FACULTY OF SCIENCE
DEPARTMENT OF CHEMISTRY
COURSE OUTLINE

1. **Course:** CHEM 353, Organic Chemistry II -- Spring 2018

Instructor Name	Email	Phone	Office	Hours
L01: (MWF 09:00 - 10:50 in AD 142)				
Violeta Iosub	TBA	TBA	TBA	TBA

Course Site:

D2L: CHEM 353 L01-(Spring 2018)-Organic Chemistry II

LEC	DAYS	TIME	ROOM	INSTRUCTOR	OFFICE	PHONE	EMAIL	OFFICE HOURS
L01	MWF	9:00-10:50	AD 142	Dr. V. Iosub	SA 144C	220-8077	viosub@ucalgary.ca	TBA

Department of Chemistry:
Office: Science A 229
Phone: 403 220-5385
Email: chem.info@ucalgary.ca

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): Chemistry 351.

Antirequisite(s): Credit for Chemistry 353 and either 355 or 357 will not be allowed.

Notes: Students are advised to take Chemistry 351 and 353 in consecutive terms.

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
Midterm Exam	20%	Tuesday, June 5th, 5-7pm
Final Exam	45%	Scheduled by Register
Laboratory	20%	
E-learning (Clickers/tutorial assignments)	15%	

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 %	85 %	80 %	75%	70%	65 %	60 %	55%	50%	45 %	40 %

This course has a registrar scheduled final exam.

Notes:

(1) 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 meet the following requirements: (1) achieve a minimum 50% in the laboratory grading, and (2) achieve either a minimum 50% on the Final examination, or a minimum 50% weighted average on the examinations (Midterm and Final).

(2) This means that if a student scores below 50% in either the laboratory component or the examinations, then the maximum course letter grade they can obtain in CHEM 353 is a D+.

(3) The e-Learning mark is based on the best five out of six components: five equally weighted tutorial assignments to be completed using Moodle (free system) and the Top Hat "clicker" mark. The Top Hat "clicker" mark is based equally on your responses and participation to questions asked during in the lecture time of the section you are officially registered in. If you opt not to use Top Hat then your e-Learning mark automatically comes from the tutorial assignments.

(4) Tutorial assignments are written under “exam conditions” (as described below). You will be allowed to use a non-programmable calculator and/or molecular model kit and have access to a periodic table and spectroscopy data tables if required. Absolutely no other resources of any kind can be used while completing an assignment, (see course website for more details). Breaking these rules will be reported as academic misconduct.

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

The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in Section 3.6. It is the student's responsibility to familiarize himself/herself/themself with these regulations. See also Section E.3 of the University Calendar.

Deferred examinations will ONLY be provided for the Final Examination and then only with the approval of the Associate Dean. There are no deferred Midterms.

As with other coursework, absences from the midterm must be reported within 48 hrs. In the event that a student misses the midterm due to illness then an official medical note will be required. If a student misses the midterm for other reasons, then analogous documentation will be required. The Chem 353 course coordinator will need to see the original documentation for review / decision and keep it (or a copy) for their records. The documentation must be provided to the course coordinator within 15 days of the date of the midterm 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 transferred to the final examination. If no such documentation is provided within the required time frame then a grade of zero will be assigned to the midterm.

For missed laboratory work, you are required to make up the missed work within 1 week, see the ‘Laboratory’ section of Chem 353 course website. If a student misses an experiment or a make-up session for non-legitimate reasons (e.g. vacation), and did not perform the experiment, the contribution of that experiment in the laboratory grade will be zero.

For missed CAL assignments students are expected to make up the missed assignment. In the event that this is not possible, then the assignment will be assigned a grade equal to the grade on the Final examination. See the ‘CAL assignments’ section of the Chem 353 course website.

5. **Scheduled out-of-class activities:**

The following out of class activities are scheduled for this course.

Activity	Location	Date and Time	Duration
CHEM 353 Midterm	TBA	Tuesday, June 5, 2018 at 5:00 pm	2 Hours

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a conflict with the out-of-class-time-activity, please contact your course coordinator/instructor no later than **14 days prior** to the date of the out-of-class activity so that alternative arrangements may be made.

The CHEM 353 MIDTERM will be held on the EVENING of Tuesday, June 5th 2018, 5:00-7:00pm.

If you have a conflict with the scheduled Chem 353 Midterm time, please email the course coordinator including a copy of your weekly university schedule (email facilitates a reply etc.) as soon as possible BUT A MINIMUM OF TEN DAYS in advance of the midterm date so that an ALTERNATE (earlier) examination time can be arranged for you. See note in section 4 about deferred examinations.

If another class has an out of class course activity, such as a midterm, that conflicts with any part of your Chem 353 (lecture, laboratory or tutorial) then UofC regulations require that the other course is required to make alternate arrangements that fit your schedule so you must contact that course coordinator for them to make those required alternate arrangements.

6. **Course Materials:**

Textbook: No text book is required. We will provide links to the Organic Chemistry etext on the course website.

If you wish to purchase a textbook because it better suits your individual learning style, then “Organic Chemistry” by Jones (Norton publisher) is a good choice for our courses, otherwise ask your instructor.

Molecular Models: very strongly recommended (they are an allowed resource in examinations, available from the Bookstore).

Chemistry 353 Laboratory Manual (free, online on the course website).

A self-duplicating Laboratory Notebook (required, available from the Bookstore)

A Laboratory safety coat (required, available from the Bookstore)

Top Hat account (available from Top Hat, see course website for more details, free for UofC students)

Moodle: (free) UofC run system used to administer Chem 353 tutorial assignments.

7. **Examination Policy:**

“Exam conditions” All examinations, tutorial assignments, laboratory quizzes etc. are closed book. Model kits and non-programmable calculators are allowed, a periodic table and spectroscopy data tables will be provided if required. No other aids including any form of "cheat" or "data" materials. Wireless devices and other electronic devices are not allowed.

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

8. **Approved Mandatory and Optional Course Supplemental Fees:**

Laboratory Breakage Fees and Locker Check-out: The Department of Chemistry has a laboratory glassware breakage fee. At the start of the course, each student is assigned a locker and checks-in to establish that they have a complete set of usable glassware. By signing for check-in, a student agrees that they are now responsible for the glassware until check out. Any equipment that is missing, unusable or has been replaced during the semester will be charged to the student. All students, even those who withdraw early from the course must check out of the laboratory before the last day of lectures (Tuesday June 26th 2018). Any student who fails to check out before the last day of lectures for the term will be assessed a charge of $30.00. If this fee is not paid by the payment deadline (Jan 31 for Fall courses, April 30 for Winter courses, July 15 for Spring courses), an additional $10.00 administrative fee will be charged and university services (registration, transcripts, etc.) may be withheld.

We keep the original signed form until the end of the course. This is like any rental agreement…. if you rent a car, you check it over before you take it because you know you will have to pay for any damage that occurs while it is in your possession….. you are renting the laboratory equipment from us for the duration of the semester, except there is no charge unless you break or misplace your equipment.

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.

    1. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **15 days** of either being notified about the mark, orof the item's return to the class. If the student is not satisfied with the outcome, the student shall immediately submit the Reappraisal of Graded Term work form to the department in which the course is offered. The department will arrange for a re-assessment of the work if, and only if, the student has sufficient academic grounds. See sections I.1 and I.2 of the University Calendar

    2. **Final Exam:** The student shall submit the request to Enrolment Services. See Section I.3 of the University Calendar.

    3. Laboratory work- The appeal should be made first to your **laboratory TA** and only then to the laboratory coordinator. **If you need to appeal to the laboratory coordinator, then you need to provide the report and a written statement (clearly stating your concern) and your contact information within the 15 day period.**

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. **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**.

    c. **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on assembly points.

    d. **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 . 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.

e. **Safewalk:** Campus Security will escort individuals day or night (See the Campus Safewalk website). Call 403-220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.

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 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: suvpaca@ucalgary.ca.

h. **Internet and Electronic Device Information:** Unless instructed otherwise, cell phones should be turned off during class. All communication with other individuals via laptop, tablet, smart phone or other device is prohibited during class unless specifically permitted by the instructor. Students that violate this policy may be asked to leave the classroom. Repeated violations may result in a charge of misconduct.

i. **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.

j. **SU Wellness Center:** The Students Union Wellness Centre provides health and wellness support for students including information and counselling on physical health, mental health and nutrition. For more information, see www.ucalgary.ca/wellnesscentre or call 403-210-9355.

13. Laboratory Information

Laboratory work starts on **May 14th 2018**. It is mandatory that students wear a laboratory coat and safety glasses at all times when working in the laboratory. Students wearing inappropriate laboratory attire will not be permitted to conduct experiments for safety reasons. The manual can be found online (http://www.chem.ucalgary.ca/courses/350/laboratory/353laboratory_sp18.html). You must consult the online laboratory manual prior to attending any of your scheduled laboratory periods and printout the required portion of the manual that outlines the procedures you will be doing.

Students repeating the course within the last two years can be exempted from the Laboratory Component of the Course if a grade of 75% or higher was obtained. The laboratory grade achieved on the previous attempt will be carried forward. Such students must contact the Chemistry Undergraduate Program Administrator in the Chemistry Main Office, SA 229 **before the drop date** (**Friday, May 18, 2018).**

14. Laboratory Safety Course

All undergraduate students taking chemistry laboratories are required to complete an introductory course (approx. 50 minutes) on laboratory safety. This course is presented in an online format. The Safety Course must be completed before the first laboratory experiment. Students who do not complete the safety lessons will subsequently be denied admission to the laboratories. While it will not count directly to the final grade, the material is considered to be part of the course and is therefore appropriate for inclusion into laboratory pre-labs and exams. Students who have previously completed the Chemistry Safety Course at the University of Calgary in the past five years are NOT required to repeat it.

Department Approval:	Electronically Approved	**Date:** 2018-05-04 10:28
Associate Dean's Approval for out of regular class-time activity:	Electronically Approved	**Date:** 2018-05-04 11:16

Course Outcomes

- • Analyze and use the structural and electronic characteristics of the organic species to predict or rationalise properties and reactivity.
- • Draw reasonable reaction mechanisms with appropriate curved arrows to account for the step by step bonding changes in organic reactions.
- • Design and evaluate feasible syntheses of small organic molecules from simple starting materials.
- • Classify molecules as being aromatic, non-aromatic or anti-aromatic to recognise and describe the implications this has on their stability, properties and reactivity.
- • Analyse chemical information to determine a reasonable solution to a problem involving the reactions and / or spectroscopic data of organic species.
- • Use experimental procedures to safely set-up, perform and clean up reactions that apply standard introductory organic techniques and report the outcomes.