



UNIVERSITY OF CALGARY  
FACULTY OF SCIENCE  
DEPARTMENT OF CHEMISTRY  
COURSE OUTLINE  
WINTER 2016

1. **Course:** Chemistry 203, General Chemistry: Change and Equilibrium

LEC	DAYS	TIME	ROOM	INSTRUCTOR	OFFICE	EMAIL	OFFICE HOURS
L01	MWF	1:00-1:50	SB 103	Dr. Y. Carpenter	EEEL 237B	yyscarpe@ucalgary.ca	TBA
L02	MWF	2:00-2:50	SB 103	Dr. Y. Carpenter	EEEL 237B	yyscarpe@ucalgary.ca	
L03	TuTh	9:30-10:45	SB 103	Dr. R. Marriott	SB 221	rob.marriott@ucalgary.ca	

**Course, Lab, and Tutorial coordinator:** Dr. Yuen-ying Carpenter (EEEL 237B | yyscarpe@ucalgary.ca)

Course website: [d2l.ucalgary.ca](http://d2l.ucalgary.ca) [CHEM 203 L01-L03 - (Winter 2016) - General Chemistry: Change and Equilibrium]  
Departmental Office: SA 229 | 403.220.5341 | [chem.undergrad@ucalgary.ca](mailto:chem.undergrad@ucalgary.ca)

2. **Prerequisites:** Chemistry 30 (or Continuing Education - Introduction to Chemistry) and one of Mathematics 30-1 or Pure Mathematics 30 or Mathematics II (offered by Continuing Education). Mathematics 31 is strongly recommended. (<http://www.ucalgary.ca/pubs/calendar/current/chemistry.html#6508>).

3. **Grading:** The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Laboratory Experiments	25%
Tutorial activities	10%
Term Test 1	10% (Mon. Feb. 8 <sup>th</sup> 2016, 7-9pm)
Term Test 2	15% (Mon. Mar. 21 <sup>st</sup> 2016, 7-9pm)
Final Examination	40% (To be scheduled by the Registrar)

Each piece of work submitted by the student will be assigned a numerical score. The total score for work submitted in each course component will be weighted according to the percentages above to produce an overall percentage score for the course. This overall course percentage score will be converted to a letter grade using the scale below:

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	F
92%- 100%	86%- 91.9%	82%- 85.9%	78%- 81.9%	74%- 77.9%	70%- 73.9%	66%- 69.9%	62%- 65.9%	58%- 61.9%	54%- 57.9%	50%- 53.9%	< 50%

**Notes:**

(1) A minimum 50% on the laboratory AND submission of no less than three of the laboratory reports is required in order to satisfy prerequisite requirements (i.e. C-) for further Science courses.

(2) A minimum 50% weighted average on the examinations (Term Tests and Final) is required in order to satisfy prerequisite requirements (i.e. C-) for further Science courses.

(3) Notes (1) and (2) mean that if a student scores below 50% in either the laboratory component or the examinations, then the *maximum* grade they can obtain in CHEM 203 is a D+.

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 with these regulations. See also Section E.6 of the University Calendar

5. **Scheduled out-of-class activities:** The term tests will be held out-of-class on the EVENINGS of Monday, February 8th, 2016 and Monday, March 21st, 2016, from 7:00-9:00pm (rooms TBA).

**REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY.** If you have a scheduled U or C class that clashes with any of the term test exams, please inform your instructor as soon as possible (but no later than one week before the term test). There are no deferred term test examinations. The weight of a legitimately missed midterm examination will be pro-rated among the remaining components of the course.

6. **Course Materials:**

- Textbook: *Chemistry and Chemical Reactivity, Ninth Edition* by J.C. Kotz, P.M. Treichel and J.R. Townsend, Brooks/Cole, CENGAGE Learning, 2015 (available in print or electronic form), plus printed access code for eLibrary and the Student Solutions Manual.
- Two Chemistry Laboratory Report booklets
- Lab coat & safety glasses
- A non-programmable scientific calculator (Casio FX 260 or equivalent).

In addition, students are strongly recommended to bring their cell phone, tablet, or laptop to lectures and participate during in-class Top Hat activity questions. Access to Top Hat is free for registered students. Each student's lowest non-zero tutorial quiz score can be replaced with their cumulative Top Hat score (see also, item 11). More details will be provided on the first day of lecture.

7. **Examination Policy:** All sections will write the same examinations. The questions are based on input from all instructors for the course. During exams students are allowed to bring only pencils, pens, erasers, their ID card, and non-programmable calculators. If in doubt, check your calculator with your instructor prior to the midterm exam (programmable TI graphing calculators from high school are not acceptable). Students should also read the Calendar, [Section G](#), on Examinations.
8. **Approved Mandatory and Optional Course Supplemental Fees:** 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 for the term (*Wednesday, April 13<sup>th</sup>, 2016*). Any student who fails to check out before the last day of lectures will be assessed a charge of \$30.00. If this fee is not paid by the last day of the final examination period of the term (*Wednesday, April 27<sup>th</sup>, 2016*), an additional \$10.00 administrative fee will be charged and university services (registration, transcripts, etc.) may be withheld.
9. **Writing across the curriculum statement:** In this course, the quality of the student's writing in laboratory reports will be a factor in the evaluation of those reports. See also [Section E.2](#) of the University Calendar.
10. **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 prelabs and exams.
11. **Laboratory and Tutorial information:** Along with the Lecture component of the course students are scheduled for tutorials and laboratory experiments in alternating weeks. The schedule is arranged such that in any given week all students in the entire course will perform either a tutorial or a laboratory experiment. ***Tutorials begin the week of January 18<sup>th</sup>, 2016 and laboratory experiments begin the week of January 25<sup>th</sup>, 2016. Consult your schedule on MyUofC for exact times and room assignments.***

**Laboratory Experiments.** The Laboratory Manual is available online through Desire2Learn (D2L). You are expected to print out the portion of the manual you will need for any experiment you will be doing, and complete the online pre-laboratory assignment prior to attending any of your scheduled lab periods. The grade for each experiment will be based on your pre-laboratory assignment, your attendance in the laboratory, and the required experimental report. Students wearing inappropriate laboratory attire or with incomplete pre-laboratory assignments will not be permitted to conduct experiments for safety reasons (see online lab manual for details).

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 lab grade achieved on the previous attempt will be carried forward. Such students must contact the Chemistry Undergraduate Program Administrator, Ms. Jin Meng, in the Chemistry Main Office, SA 229 **before the drop date (January 22<sup>nd</sup>, 2016).**

*Tutorials. You must attend your assigned time slot.* During each 75-minute tutorial, students work collaboratively in groups of 3 or 4 on a series of problems before writing an individual quiz. Tutorials allow students to meet and work closely with other students. There are pre-tutorial assignments on D2L that *must* be completed before attending any tutorial. Your lowest non-zero tutorial quiz grade can be replaced by cumulative scores of in-class Top Hat questions from lectures (see also item 6, above).

## 12. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) **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.
- (b) **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- (c) **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 [http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities\\_0.pdf](http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.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, preferably in writing, to the Associate Head of Chemistry, Dr. Ashley Causton, by email [ahugchem@ucalgary.ca](mailto:ahugchem@ucalgary.ca) or phone (403) 220-5353.
- (d) **Safewalk:** Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, 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 also <http://www.ucalgary.ca/secretariat/privacy>.
- (f) **Student Union Information:** VP Academic Phone: 403 220-3911 Email: [suypaca@ucalgary.ca](mailto:suypaca@ucalgary.ca)  
SU Faculty Rep. Phone: 403 220-3913 Email: [science1@su.ucalgary.ca](mailto:science1@su.ucalgary.ca), [science2@su.ucalgary.ca](mailto:science2@su.ucalgary.ca) and [science3@su.ucalgary.ca](mailto:science3@su.ucalgary.ca);  
Student Ombuds Office: 403 220-6420 Email [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca) <http://ucalgary.ca/provost/students/ombuds>
- (g) **Internet and Electronic Device Information:** You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.
- (h) **U.S.R.I.:** At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses ([www.ucalgary.ca/usri](http://www.ucalgary.ca/usri)). Your responses make a difference - please participate in USRI Surveys.

Department Approval: Approved by Department Head

Date: December 15, 2015

Associate Dean's Approval for  
out of regular class-time activity: Approved by Associate Dean

Date: December 22, 2015