



DEPARTMENT OF CHEMISTRY  
COURSE OUTLINE  
Winter 2015

1. **COURSE: CHEMISTRY 203, General Chemistry: Change and Equilibrium**

LEC	DAYS	TIME	ROOM	INSTRUCTOR	OFFICE	E-MAIL	OFFICE HOURS
L01	MWF	1:00- 1:50	SB 103	Dr. Kal Mahadev	EEEL 237C	<a href="mailto:mahadev@ucalgary.ca">mahadev@ucalgary.ca</a>	TBA
L02	MWF	2:00-2:50	SB 103	Dr. Julie Lefebvre	EEEL 237B	<a href="mailto:jlefebv@ucalgary.ca">jlefebv@ucalgary.ca</a>	TBA
L03	TR	9:30 -10:45	SB 103	Dr. Erin Sullivan	SA 144D	<a href="mailto:ersulliv@ucalgary.ca">ersulliv@ucalgary.ca</a>	TBA

Course, Lab and Tutorial Coordinator: Dr. Kal Mahadev (EEEL 237C), [mahadev@ucalgary.ca](mailto:mahadev@ucalgary.ca)

Course website: <https://d2l.ucalgary.ca/d2l/home>

Departmental Office: SA 229, 220-5341, [chem.undergrad@ucalgary.ca](mailto:chem.undergrad@ucalgary.ca)

2. **PREREQUISITES:** Chemistry 30 (or Continuing Education - Introduction to Chemistry) and one of Pure Mathematics 30 or Mathematics II (offered by Continuing Education). Mathematics 31 is strongly recommended. (<http://www.ucalgary.ca/pubs/calendar/current/chemistry.html#6507>).
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% <b>(February 2<sup>nd</sup>, 2015, 7-9 pm)</b> |
| Term Test 2                    | 15% <b>(March 9<sup>th</sup>, 2015, 7-9pm)</b>     |
| Final Examination (cumulative) | 40% <b>(To be scheduled by the Registrar)</b>      |

The student's average percentage score for the various components listed above will be combined with the indicated weights to produce an overall percentage for the course that will determine the course letter grade. The conversion between final course percentage and letter grade is given below

**Grading Scale:**

<b>A+</b>	<b>A</b>	<b>A-</b>	<b>B+</b>	<b>B</b>	<b>B-</b>
<b>95% - 100%</b>	<b>87% - 94.99%</b>	<b>82% - 86.99%</b>	<b>77% - 81.99%</b>	<b>72% -76.99%</b>	<b>66% - 71.99%</b>
<b>C+</b>	<b>C</b>	<b>C-</b>	<b>D+</b>	<b>D</b>	<b>F</b>
<b>62% - 65.99%</b>	<b>58% - 61.99%</b>	<b>54% - 57.99%</b>	<b>50% - 53.99%</b>	<b>45% - 49.99%</b>	<b>&lt; 44.99%</b>

**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 (TT's and FIN) **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) In any written work, the quality of the writing (language, spelling, grammar *etc.*) will be evaluated See also <http://www.ucalgary.ca/pubs/calendar/current/e-2.html>.

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:  
<http://www.ucalgary.ca/pubs/calendar/current/sc-3-6.html>.

It is the student's responsibility to familiarize himself/herself with these regulations. See also  
<http://www.ucalgary.ca/pubs/calendar/current/e-3.html>.

5. **REGULARLY SCHEDULED U of C CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS TIME-ACTIVITY.** If you have a scheduled U of C class which clashes with either of the scheduled term tests. Please inform your instructor by Friday, January 23<sup>rd</sup>, 2015 (for term test 1) or Friday, February 27<sup>th</sup>, 2015 (for Term test 2), so that other arrangements can be made for you. **Please note that there are no deferred term test examinations.** The weight of a legitimately missed term test examination will be pro-rated among the remaining components of the course.

6. **EXAMINATIONS:** All sections will write the same examinations. The questions are based on input from all instructors for the course. Academic Accommodations – It is the students' responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodations and have not registered with Student Accessibility Services, please contact them at 403-220-6019. Students who have not registered with Student Accessibility Services are not eligible for formal academic accommodations. More information about academic accommodations can be found at [www.ucalgary.ca/access](http://www.ucalgary.ca/access).

**The term tests will be held OUT OF CLASS on the EVENINGS of Monday, February 2<sup>nd</sup>, 2015 7:00-9:00pm (rooms TBA) and Monday, March 9<sup>th</sup>, 2015, 7:00-9:00pm (rooms TBA).**

During exams students are allowed to bring only pencils, pens, erasers, their ID card, and **non-programmable calculators (recommended calculator is the CASIO fx-260 solar)**. If in doubt, check your calculator with your instructor prior to the midterm exam (the programmable TI calculators from high school are not acceptable). Students should also read the Calendar, Section G, on Examinations:  
<http://www.ucalgary.ca/pubs/calendar/current/g.html>.

7. **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. 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 last day of the final examination period of the term, an additional \$10.00 administrative fee will be charged and university services (registration, transcripts, etc.) may be withheld. *The last day of withdrawal from any half year course is stated in the 2014-2015 Calendar as Wednesday, April 15<sup>th</sup>, 2015 (<http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>).*

8. **REQUIRED MATERIALS:** (available in the Bookstore or purchased online)

- Textbook (*"Chemistry and Chemical Reactivity", Eighth Edition* by J.C. Kotz, P.M. Treichel and J.R. Townsend, Books/Cole CENGAGE Learning, 2012 (available in print or electronic form), plus printed access code for e-Library and the Student Solutions Manual).
- Two Chemistry Laboratory Notebooks
- Lab coat and Safety glasses
- A non-programmable scientific calculator (Casio FX 260 or equivalent).

9. **OPTIONAL MATERIALS:** Students may opt to participate in an in-class question activity (Top Hat) during of the lecture. This will be described in detail on the first day of class.

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 wet 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.

- 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. **Your Tutorials begin during the week of Jan 12th, 2015 and Laboratory Experiments begin during the week of January 19th, 2015.** Consult your Peoplesoft schedule for exact times and room assignments.

*Laboratory Experiments:* **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. Such students must contact the Chemistry Undergraduate Program Administrator, Ms. Jin Meng in the Chemistry Main Office, SA 229 before the add drop date.** The Laboratory Manual is available online through D2L. **You print out the portion of the manual for the wet experiment you will be doing, and complete the pre-laboratory assignment posted on D2L prior to attending any of your scheduled lab periods.** 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). There will be a quiz based on the pre-lab assignment. The grade for each experiment will be based on your pre-laboratory assignment, quiz and the required experimental report. **When attending your first experiment you also need to bring a printout of your most up to date timetable.**

*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 and members of the Department. **There are pre-tutorial assignments (found on D2L) that must be completed before attending any tutorial.** The lowest obtained tutorial quiz grade may be replaced by the in-class question (Top Hat) portion of the lecture (see item 9).

**12. OTHER IMPORTANT INFORMATION FOR STUDENTS:**

- (a) **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 (<http://www.ucalgary.ca/honesty/>). Please read the sections of the University Calendar under K. Student Misconduct (<http://www.ucalgary.ca/pubs/calendar/current/k.html>) 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 at <http://www.ucalgary.ca/emergencyplan/assemblypoints>.**
- (c) **ACADEMIC ACCOMMODATION POLICY.** It is the students' responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodations and have not registered with Student Accessibility Services, please contact them at 403-220-6019. Students who have not registered with Student Accessibility Services are not eligible for formal academic accommodations. More information about academic accommodations can be found at [www.ucalgary.ca/access](http://www.ucalgary.ca/access).
- (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 (FOIPPA). 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:** 220-3911 **Email:** [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca).  
SU Faculty Rep: **Phone:** 220-3913 **Email:** [sciencerep@su.ucalgary.ca](mailto:sciencerep@su.ucalgary.ca)  
Student Ombudsman: <http://www.su.ucalgary.ca/page/quality-education/academic-services/student-rights>

- (g) INTERNET and ELECTRONIC COMMUNICATION DEVICE Information.** Use of laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor for use with D2L or Top Hat (see items 1 and 10). If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.
- (h) Students who in the view of the instructor engage in disruptive behavior during lectures will be asked to leave the classroom.**

Department Approval: Approved by Department Head

Date: 1 December 2014

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

Date: 8 December 2014