

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

**1. COURSE: CHEMISTRY 201, General Chemistry: Structure & Bonding**

LEC	DAYS	TIME	ROOM	INSTRUCTOR	OFFICE	EMAIL
L01	MWF	13:00-13:50	SB 103	Dr. V. Iosub	SA 144C	<a href="mailto:viosub@ucalgary.ca">viosub@ucalgary.ca</a>
L02	MWF	14:00-14:50	SB 103	Dr. V. Iosub	SA 144C	<a href="mailto:viosub@ucalgary.ca">viosub@ucalgary.ca</a>
L03	TR	9:30-10:45	SB 103	Dr. E. Sullivan	SA 144D	<a href="mailto:ersulliv@ucalgary.ca">ersulliv@ucalgary.ca</a>

Course, Laboratory and Tutorial Coordinator: Dr. Erin Sullivan (SA 144D, [ersulliv@ucalgary.ca](mailto:ersulliv@ucalgary.ca))

Course website [d2l.ucalgary.ca](http://d2l.ucalgary.ca): CHEM 201 L01-L03 - (Fall 2016) - General Chemistry: Structure and Bonding

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 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% (October 3 <sup>rd</sup> 2016, 7-9pm)
Term Test 2	15% (November 7 <sup>th</sup> 2016, 7-9pm)
Final Examination	40% (To be scheduled by the Registrar)

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

**Notes:**

In order to achieve the prerequisite requirements (i.e., C-) for further Science courses, a student must meet **all** of the following requirements:

- (1) submit no less than three of the laboratory reports, and
- (2) achieve a minimum 50% in the laboratory grading, and
- (3) achieve a minimum 50% weighted average on the examinations (Term Tests and Final).

This means that if a student scores below 50% in either the laboratory component or the examinations, then the *maximum* grade they can obtain in CHEM 201 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 October 3<sup>rd</sup>, 2016 and Monday November 7<sup>th</sup>, 2016, 7:00-9:00pm (rooms TBA).

**REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY.** If you have a conflict with this out-of-class-time-activity, please inform your instructor by Tuesday September 27<sup>th</sup> 2016 (for term test 1) and Monday, October 31<sup>st</sup>, 2016 (for term test 2), so that other arrangements can be made for you. 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:** (recommended/required available in the Bookstore or purchased online)
- Textbook (“*Chemistry and Chemical Reactivity*”, Ninth Edition by J.C. Kotz, P.M. Treichel and J.R. Townsend, Books/Cole CENGAGE Learning, 2015 (available in print or electronic form), plus printed access code for eLibrary and the Student Solutions Manual).
  - Three blue Chemistry Laboratory Notebooks (required)
  - Lab coat & safety glasses (required)
  - Model Kit (Molymod recommended)
  - A non-programmable scientific calculator (Casio FX 260 or equivalent).

**OTHER OPTIONAL MATERIALS:** Students may opt to participate in lecture question activities using TopHat. This will be described in detail on the first day of class.

7. **Examination Policy:** All sections will write the same examinations. The questions are based on input from all instructors for the course. Special Needs Students must be registered with Student Accessibility Services (see section 11(c) below), and must identify themselves to their instructor as soon as possible.

During exams students are allowed to bring only pencils, pens, erasers, their ID card, a model kit and a non-programmable calculator. 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.

8. **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 2016-2017 Calendar as Friday, December 9<sup>th</sup>, 2016* (<http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>).

9. **Writing across the curriculum statement:** e.g. “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. **Human studies statement:** If you consent, your coursework may be used for educational research purposes once the course is over. Individual responses will remain anonymous and confidential. Grouped data will be used in academic presentations and publications. Participation in such research is voluntary and will not influence grades in this course. Students’ signed consent forms will be withheld from course instructors until after final grades are submitted. More information will be provided at the time student participation is requested. See [Section E.5](#) of the University Calendar.

#### 11. 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.3](#) 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](#). 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. Farideh Jalilehvand, 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 (403) 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: [suvpaca@ucalgary.ca](mailto:suvpaca@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.

12. **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 & is therefore appropriate for inclusion into laboratory prelabs & exams.

13. **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. *Laboratory Experiments begin the week of September 19<sup>th</sup>, 2016 and Tutorials begin the week of September 26<sup>th</sup>, 2016. Consult your Peoplesoft schedule for exact times and room assignments.*

*Laboratory Experiments.* The Laboratory Manual is available online through the course D2L website. 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. Such students must contact the Chemistry Undergraduate Program Administrator, Ms. Jin Meng, in the Chemistry Main Office, SA 229 before the drop date (September 23<sup>rd</sup>, 2016).

*Tutorials.* You must attend your assigned time slot. During each 75 minute tutorial, students work collaboratively in small groups on a series of problems before writing a quiz. Tutorials allow students to meet and work closely with other students and a member of the Department. There are pre-tutorial assignments (found on the course D2L website) that must be completed before attending any tutorial. The lowest obtained non-zero tutorial grade can be replaced by the in-class question portion of the lecture (TopHat, see item 6).

Department Approval: Approved by Department Head

Date: August 30, 2016

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

Date: September 1, 2016