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**Ryerson University**  
**Department of Chemistry and Biology**

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**Course Information Sheet**

**Course Number**            CHY 123

**Course Name**             General Chemistry I

**Date**                        Fall 2013

**Instructors**             Dr. D errick Rousseau  
                                  KHE 327-C  
                                  (416)-979-5000 ext. 2155  
                                  rousseau@ryerson.ca

**Office Hours**             Mondays 830-1030

**Course Description**     This lecture course includes the following topics: dimensional analysis, stoichiometry, reactions in solution, properties of solutions, chemical equilibrium, acids and bases, aqueous equilibrium, electronic structure of atoms, quantum mechanics, periodicity, electron configurations, bonding, shapes of molecules, and hybridization. The treatment of the above topics will emphasize understanding of chemical principles and their application to problem solving and calculations.

**Topics Covered**

Topic	Chapter
Introductory Material	1, 2
Formulas Equations and Moles	3
Reactions in Aqueous Solutions	4
Aqueous Equilibria: Acids and Bases	14
Periodicity and Atomic Structure	5
Ionic Bonds and Some Main-Group Chemistry	6
Covalent Bonds and Molecular Structure	7
Solutions and their Properties	11
Chemical Equilibrium	13
Applications of Aqueous Equilibria	15

**Instruction Mode**        Lecture: 3 hours.

**Prerequisite**            Grade 12 U Chemistry (SCH4U) or equivalent

**Text and Readings**     Chemistry, sixth edition, McMurry & Fay, Pearson Prentice Hall, 2012.

**Calculator**             Recent versions of non-programmable Sharp or Casio calculators are available at the Ryerson Bookstore.

**Other materials**        Laboratory kit, laboratory coat, safety glasses.

<b>Evaluation</b>	Laboratory component	20 %
	Term test #1	20 %
	Term test #2	25 %
	Final exam	35 %
	<b>Total</b>	<b>100%</b>

**Important note**        Students are required to pass ***both*** the laboratory and the lecture parts of this course in order to receive a passing grade. Failure to pass either component will result in a failing grade, regardless of whether or not the cumulative score is a passing mark.

The Final Examination is comprehensive.

## **Grades / Grade Posting**

Grades will be posted on Blackboard in accordance with the Ryerson University Course Management Policy.

Final grades will be determined using the performance designations for the Faculty of Science found in the Ryerson University Undergraduate Calendar. Instructors are not permitted to inform students of their final course grade.

## **Course Policies**

Please contact the instructor regarding any of the course policies below.

**Academic Consideration:** You must inform the instructor as soon as possible of any situation which arises during the semester that is likely to have an adverse effect on your academic performance. Any necessary consideration must be requested according to policies and well in advance. Failure to do so will jeopardize any academic appeals.

**Missed Examination/Laboratory:** You are responsible for writing exams and attending laboratories as scheduled. If you cannot do so as a result of a valid medical or compassionate reason, you must: 1) request academic consideration from the instructor as soon as possible, and 2) submit a Ryerson Student Medical Certificate AND an Academic Consideration form within three working days of the missed date. Both documents are available at [www.ryerson.ca/senate/forms/medical.pdf](http://www.ryerson.ca/senate/forms/medical.pdf). If you are a full-time or part-time degree student, then you submit your forms to your own program department or school. Please note that Ryerson is open for business during Reading Week. You should ensure that the documentation is date-stamped by office staff. If the instructor grants academic consideration, then a make-up evaluation or laboratory will be scheduled where feasible. Failure to comply with these procedures will result in a score of zero for the examination/laboratory.

**Missed Final Examination:** If you miss the final examination for a valid medical or compassionate reason, you must: 1) request academic consideration from the instructor as soon as possible, and 2) submit a Ryerson Student Medical Certificate AND an Academic Consideration form within three working days of the missed date. Both documents are available at [www.ryerson.ca/senate/forms/medical.pdf](http://www.ryerson.ca/senate/forms/medical.pdf). If you are a full-time or part-time degree student, then you submit your forms to your own program department or school. You should ensure that the documentation is date-stamped by office staff. If the instructor grants academic consideration, a supplementary examination will be scheduled within the remaining examination period, or if this has ended, as soon as possible before the deadline for the instructor to submit course grades. In cases where an INC grade must be given, the make-up examination will be scheduled within two weeks of the beginning of the next semester. Details of the University examination policy can be found at [www.ryerson.ca/senate/policies/pol135.pdf](http://www.ryerson.ca/senate/policies/pol135.pdf).

**Withdrawal from the course:** If you wish to officially withdraw from this course with no academic penalty, you must do so by Friday, November 15, 2013.

**Communication by e-mail:** Important information may be conveyed from the instructors to students by e-mail to their my.ryerson.ca e-mail account. Students are responsible for checking this e-mail account on a regular basis. Students are welcome to contact the instructor by e-mail. Please use proper English sentences, with correct spelling and grammar.

**Blackboard:** CHY 123 has a Blackboard site. Important course information and announcements are posted on this site; students are responsible for checking it on a regular basis. Generally, material presented in class in an electronic format (e.g. PowerPoint slides) will be posted on Blackboard in .pdf. Note, however, that these materials **will** be incomplete and must be supplemented during the lectures by notes from discussions and examples.

**Religious Observance Policy:** If you will require religious accommodation, you must obtain and complete the official request form (see <http://www.ryerson.ca/currentstudents/forms/>). This should be submitted to the instructor within the first two weeks of the semester, or as soon as possible. You should request religious accommodation well in advance of the date

of the observance, even if that date can be determined only approximately beforehand. If you require religious accommodation within the first two weeks of September, please notify the instructor as soon as possible so that alternative arrangements can be determined.

**Access Centre:** If you have existing Access Centre accommodations, you should meet with the instructor at the beginning of the course to discuss your needs. If you register with the Access Center during the semester, you must speak to the instructor as soon as your needs are identified.

**Academic Integrity:** Plagiarism and/or cheating are unacceptable. Details of the Student Code of Academic Conduct are provided at [www.ryerson.ca/senate/policies/pol60.pdf](http://www.ryerson.ca/senate/policies/pol60.pdf). If you are unsure of what is acceptable, you should consult with the instructors. See also [www.ryerson.ca/academicintegrity](http://www.ryerson.ca/academicintegrity). The minimum penalty for academic misconduct is a DN (Disciplinary Notation) on the student's record and a 0 % on the evaluation in question.

**Course Management Policy:** Refer to [www.ryerson.ca/senate/policies/pol145.pdf](http://www.ryerson.ca/senate/policies/pol145.pdf) for complete details.

**Department Academic and Course Management Policies:** The Department of Chemistry and Biology has policies on group work, academic integrity, course variation, lecture attendance, laboratory/tutorial attendance, class participation, accommodation of students with disabilities, student e-mails, and non-academic conduct. These policies apply to all students enrolled in courses offered by the Department, faculty, staff and teaching assistants. You should be familiar with them. The policies are available online at <http://www.ryerson.ca/content/dam/cab/Forms/Coursemanagementpolicies.pdf>

**The Department website** contains a variety of useful information and contacts. The main site is at <http://www.ryerson.ca/cab/index.html>; forms and FAQs for students are at [http://www.ryerson.ca/cab/undergraduate.html#center\\_tabs](http://www.ryerson.ca/cab/undergraduate.html#center_tabs)