

Course ID:	Course Title:	Winter 2024
CHE 103	General Chemistry II	Prerequisite: Chem 30
		Credits: 3

Class Information		Instructor Information		Important Dates	
Days:	W/F	Instructor:	Kristian Caldo, BSc, MSc, PhD Thilina Jayawardana, BSc, PhD	First day of classes:	M., Jan. 8
Time:	8:15-9:30	Email:	Kristian.Caldo@ambrose.edu	Last day to add/drop, or change to audit:	Sun, Jan 21
Room:	A 2210	Phone:	(403) 407-9492	Last day to request revised exam:	Mon, Mar 4
Lab/ Tutorial:	3 of hrs/wk	Office:	A2156	Last day to withdraw from course:	Thur, Mar 28
	M 8:00-11:00 am W 1:00-4:00 pm	Office Hours:	Open-door policy	Last day to apply for coursework extension:	Tue, Apr 2
Final Exam:	Fri, Apr 19 9:00 am-11:30am A1085-2			Last day of classes:	Fri, Apr 12

Course Description

Focuses on the quantitative aspects of chemistry. Topics include chemical equilibrium, acids and bases, solubility, chemical kinetics, and electrochemistry. Instruction will consist of lecture, labs and tutorials.

Textbook (Free on-line edition):

<https://openstax.org/details/books/chemistry-2e>

Requirements:

Laboratory class and tutorials

If you did not take the lab safety course this past semester, you will need to do so prior to the first lab; it is available online on the Moodle site. You need to obtain a minimum mark of 80%.

The lab component consists of five labs; three of them involve filling in worksheets and the other two require the submission of a formal lab report.

Please print off the pre-lab quizzes; complete and hand it in prior to the start of each lab to the lab instructor. Students that do not have appropriate laboratory attire or incomplete pre-laboratory assignments will not be allowed to proceed with the lab due to safety reasons.

A mark of less than 50% in the laboratory component and/or on the weighted average of the midterm and final examinations will result in a final grade of no greater than D. Completion and submission of reports for fewer than three laboratory experiments will result in a final grade of no greater than D. A grade of D does not satisfy the pre-requisite requirements for further chemistry courses or admission to programs in Biology.

You are not allowed to use phone as your calculator; you must use a calculator to do all your work.

The labs and tutorials alternate every week. Please refer to the syllabus for the dates. During each tutorial, students will work in groups of 3-4 on a set of problems before writing an individual quiz. There will be approximately 5-6 tutorial quizzes.

Attendance:

Class participation is extremely important to your learning in this course. If you miss any class, please make sure to complete the notes from your peers. In respect to the professor and to your fellow students, we ask that you:

- a) Turn your phone off during class and that you don't use it for texting during lecture, tutorial or lab;
- b) Not have conversations with the people beside you during lecture – it is very distracting to the people around you;
- c) Use your laptops for lecture material and assignments only – that you are not using the internet or Facebook during class time;
- d) Arrive to lecture, lab and tutorial on time; you will not be permitted in the lab if you miss the pre-lab talk;

Grade Summary:

The available letters for course grades are as follows:

<u>Letter Grade</u>	<u>Description</u>
A+	Excellent
A	
A-	
B+	Good
B	
B-	
C+	Satisfactory
C	
C-	
D+	Minimal Pass
D	
F	Failure

A+	A	A-	B+	B	B-
95% - 100%	87% - 94.99%	82% - 86.99%	77% - 81.99%	72% - 76.99%	66% - 71.99%

C+	C	C-	D+	D	F
62% - 65.99%	58% - 61.99%	54% - 57.99%	50% - 53.99%	45% - 49.99%	< 44.99%

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on the student registration system. Printed grade sheets are not mailed out.

In determining the overall grade in the course, the following weights will be used:

Laboratory and Tutorials	25%
Assignments and In-class TopHat Quizzes	15%
Term Test I	15%
Term Test II	15%
Final Examination	30%

Ambrose Tutoring Services

To help you succeed in this course, Ambrose offers FREE tutoring! You can meet with an experienced peer tutor—someone who has already taken and excelled in this course—for help with understanding and applying concepts. To book an appointment, visit <https://ambrose.edu/tutoring>, and click on the appropriate discipline. Scroll down to find tutors that are eligible to tutor for this course, and then click on “Book Now.” Please book at least 24 hours in advance.

For science courses, Ambrose Tutoring Services also offers drop-in study sessions, where students can come by, individually or in groups, to ask questions or work with a tutor. Check out the schedule at <https://ambrose.edu/tutoring>, under the “Science” tab.

Ambrose Writing Centre

To demonstrate your knowledge of our course content, you will need to communicate clearly and persuasively. For help with doing research, understanding your textbooks, or writing papers and presentations, I would encourage you to visit the Ambrose Writing Centre (<https://ambrose.edu/writingcentre>). Writing Centre tutors can help at any stage of an assignment, whether you’re brainstorming ideas or polishing your grammar. To be sure you’ll get a spot, you can book an appointment online at least 24 hours in advance. If you do not have an appointment, do not worry: you can also drop by during regular writing center hours

Course Schedule: (Tentative Lecture / Tutorial / Laboratory Schedule)

Week of	Lecture	Tutorial	Lab
Jan 8	Chemical Equilibria	No Tutorial	No Lab
Jan 15	Chemical Equilibria	No Tutorial	Lab 1: Determination of Total Hardness of Water
Jan 22	Chemical Equilibria	Tutorial 1/Quiz 1	No Lab
Jan 29	Aqueous Equilibria	No Tutorial	Lab 2: UV-Vis Spectrophotometry
Feb 5	Aqueous Equilibria	No Tutorial	Lab 3: Chemical Equilibria
Feb 12	Aqueous Equilibria	Tutorial 2/Quiz 2	No Lab
Feb 19	Reading Week	No Tutorial	No Lab
Feb 26	Term Test 1: Mar 1 Chemical Kinetics	No Tutorial	Lab 4: pH and Buffers
March 4	Chemical Kinetics	Tutorial 3/Quiz 3	No Lab
March 11	Chemical Kinetics	No Tutorial	Lab 5: Chemical Kinetics
March 18	Electrochemistry	Tutorial 4 /Quiz 4	No Lab
March 25	Electrochemistry Term Test 2: March 29 March 26 ARC	Please attend at least 1 ARC talk in lieu of class.	No Lab
April 1	Electrochemistry	Tutorial 5 /Quiz 5	No Lab
April 8	Last Day of Classes: Fri, Apr 12 Final Exam: Apr 19	No Tutorial	Open Lab

Ambrose University Important Policies & Procedures:

Registration

Registration is the process of selecting and enrolling in classes for upcoming semesters. Only students who are registered will be permitted to attend class and receive a grade for the course. You are responsible for ensuring that the courses you take are appropriate for your program, that they do not have any scheduling conflicts, that they have the necessary prerequisites and that they meet all degree requirements.

Withdrawal From A Course

Prior to the Add/Drop deadline: through the student registration system whereby course(s) will be removed with no academic or financial penalty. After the Add/Drop deadline and until the Withdrawal deadline: through submission of the 'Withdrawal from Course' form whereby course(s) will remain on the permanent academic record/transcript with the symbol 'W'. (See ambrose.edu/registrar/request-forms.) Students who withdraw from more than 30 credits attempted at Ambrose University will be required to withdraw from their program. Students considering withdrawing from courses are encouraged to discuss with their Faculty Advisor and/or the Office of the Registrar questions relating to their withdrawal decision specifically relating to financial assistance, study permit requirements, prerequisites for subsequent courses, readmission, and/or graduation timeline. Students who do not formally withdraw from a course are still considered registered in the course, even if they are no longer attending classes. In this case, students will be assigned a grade based on coursework completed as per the course syllabus and are responsible to pay the tuition and fees assessed for the course. Under extenuating circumstances, students may request from the Office of the Registrar a course(s) withdrawal after the Withdrawal deadline and until the last day of classes. Extenuating circumstances typically consider situations such as medical emergencies, compassionate grounds, or unforeseen conditions/situations beyond the students' control that arise after the start of the semester and are considered on a case-by-case basis. Supporting documentation from a physician or Registered Health Professional must accompany this request.

Coursework Extensions

Should a request for a time extension on coursework exceed the end of the term, a *Coursework Extension Application* must be completed and submitted to the Office of the Registrar. The extension (if granted) will be recorded on the student record. Extensions are granted at the discretion of the instructor and registrar. If granted, time extensions do not excuse you from a final examination where one has been scheduled for the course. More conditions apply.

Exam Scheduling

Students who find a conflict in their exam schedule must submit a *Revised Final Exam Time Application* to the Office of the Registrar by the deadline noted in the Academic Calendar. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; or 2) the scheduled final examination slot results in three consecutive examination periods. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Communication

Your Ambrose email account is the University's primary and official mode of communication with you. Information delivered to your Ambrose email is considered official notification. Ambrose University is not responsible for your failure to receive important information delivered to your Ambrose email.

Lecture Recording

The recording of lectures or any other classroom academic activity, other than an audio recording as an accommodation, is prohibited except at the discretion of the instructor. Any use other than that agreed upon with the instructor constitutes academic misconduct and may result in suspension or expulsion. Permission to allow a lecture recording is not a transfer of any copyrights, so such recordings may be used only for individual or group study with other students enrolled in the same class and may not be reproduced, transferred, distributed or displayed in any public or commercial manner. Student must destroy recordings in any, and all formats at the end of the semester in which they are enrolled in the class. All students recording lectures, must sign the Permission Form to audio record lectures which is available through the Office of the Registrar.

Standards of Behaviour in the Classroom Setting

Learning is an active and interactive process, a joint venture between student and instructor and between student and student. Some topics covered within a class may lead to strong reactions and opinions. It is important that Students understand that they are entitled to hold contradictory beliefs and that they should be encouraged to engage with these topics in a critical manner. Committing to this type of "active learning" significantly increases the learning experience for both teacher and student, and reflects the Christian imperative to pursue truth, which lies at the heart of the Ambrose educational experience. However, active discussion of controversial topics will be undertaken with respect and empathy, which are the foundations of civil discourse in the Classroom Setting. Primary responsibility for managing the classroom rests with the instructor. The instructor may direct a student to leave the class if the student engages in any behaviour that disrupts the classroom setting. If necessary, Ambrose security will be contacted to escort the student from class.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university. Students are expected to be familiar with the policies in the current Academic

Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. The academic calendar can be found at <https://ambrose.edu/academics/academic-calendar>

Privacy

Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Academic Success and Supports

Accessibility Services

Academic accommodation is provided to Ambrose students with disabilities in accordance with the Alberta Human Rights Act and the Canadian Charter of Rights and Freedoms. Provision of academic accommodation does not lower the academic standards of the university nor remove the need for evaluation and the need to meet essential learning outcomes. Reasonable accommodations are tailored to the individual student, are flexible, and are determined by considering the barriers within the unique environment of a postsecondary institution. It can take time to organize academic accommodations and funding for disability-related services. Students with a disability who wish to have an academic accommodation are encouraged to contact Accessibility Services as early as possible to ensure appropriate planning for any needs that may include accommodations. Staff can then meet with students to determine areas to facilitate success, and if accommodations are required, ensure those accommodations are put in place by working with faculty.

Learning Services

Learning Services provides support with

- **research and communication skills** (e.g., writing a paper, researching, giving a presentation), and
- **subject-specific skills** (e.g., solving a chemistry problem, reconciling a general ledger, understanding a philosophical argument).

We offer workshops, one-to-one tutoring, and more, and all of our services are **free** to students currently enrolled at Ambrose University. To learn more, please visit <https://ambrose.edu/sas/learning-services>.

Mental Health Support

All of us need a support system. We encourage students to build mental health supports and to reach out when help is needed.

On Campus:

- Counselling Services: ambrose.edu/counselling

- For immediate crisis support, there are staff on campus who are trained in Suicide Intervention Skills and can help you access mental health support. See <https://ambrose.edu/student-life/crisissupport> for a list of staff members.
- For additional wellness resources go to the Ambrose wellness page: <https://ambrose.edu/wellness>

Off Campus:

- Distress Centre - 403-266-4357
- Alberta Mental Health Helpline - 1-877-303-2642 (Toll free)
- Sheldon Chumir Health Care Centre - 403-955-6200
- Emergency - 911

Sexual Violence Support

We are committed to supporting students who have experienced gender based sexual violence in the past or while at Ambrose. Many of the staff, faculty, and student leaders have received Sexual Violence Response to Disclosure training. We will support you and help you find the resources you need and you can access information about reporting. Information about the Sexual Violence policy and on and off campus supports can be found on our website— ambrose.edu/sexual-violence-response-and-awareness.

Off Campus:

- Alberta's Oneline for Sexual Violence - 1-866-403-8000 call or text
- Clinic: Sheldon Chumir Health Centre - 403-955-6200
- Calgary Communities Against Sexual Abuse - 403-237-5888
- Chat: www.calgarycasa.com

Note: Students are strongly advised to retain this syllabus for their records.