CHEM 025, Chemistry 025A

6 credits, 6 hours lecture

Instructor

Indeewarie (Indee) Weerakoon

Office S109 E

780-791-8938

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Office Hours

Monday   12:00 noon– 01:50 p.m
Tuesday   12:00 noon– 12:50 p.m
Wednesday 12:00 noon –12.50 p.m
Thursday   12:00 noon –12.50 p.m

Delivery Method(s):

In-person – offered in person (face-to-face) on campus.

Hours of Instruction & Location

Day	Time	Location
Monday	2:00 p.m. – 3:50 p.m.	CC 235
Tuesday	8:00 a.m. – 9:50 a.m.	CC 233
Thursday	8:00 a.m. – 9:50 a.m.	S 112

Required Resources

Chemistry 025 Student Manual, available in print from the Keyano Bookstore

Other lecture resources:
- **Calculator**, scientific or graphing
- **Pencil crayons**, or other colouring tools

Assessment Details and Dates

Chemistry 025 has a number of assignments, in-class quizzes and Moodle quizzes (see Moodle Calendar). Moodle quizzes are completed online, in <u>one attempt</u>, during a limited timeframe, *with <u>no</u> extensions.*

For full marks, assignments and projects must be received <u>in hard copy</u> and <u>in person</u>, in class, on the due date. If you need extra time to get an assignment completed, it will receive
- a. the earned grade, minus 5%, if received after class on the due date.
- b. the earned grade, minus 20%, for <u>each</u> additional day late.
- **c. a mark of <u>zero</u> if received after I have returned them, OR if pushed under my office door.**

There will be <u>no</u> alternative, "make-up", or "extra credit" assignments provided for this course.

Assessment	Weighting	Course Learning Outcome	Tentative Due Dates
Unit I quizzes and assignments (4)	30%, with the lowest 2 grades dropped	CLO 1 - 7	See Moodle calendar
Unit II quizzes and assignments (3)		CLO 8 - 12	
Unit III quizzes and assignments (2)		CLO 10, 13	
Unit IV quizzes and assignments (4)		CLO 14 - 17	
Unit V quizzes and assignments (4)		CLO 18, 19, 20	
Unit VI quizzes and assignments (3)		CLO 21, 22	
Chemistry Show-and-Tell Presentation	*20%*	*CLO 7 - 10*	*Thursday Feb 6*
Kitchen Chemistry Presentation		*CLO 1, 17, 18*	*Tuesday, March 11*
Midterm Exam	**25%**	**CLO 1 - 13**	**Monday Feb. 24**
Final Exam	**25%**	**CLO 14 - 22**	**TBD by College**

Proposed Course Schedule

Week & mode of delivery	Topic(s), Activities, Readings	Graded Assessments (%)	Tentative Due Dates
Week 1 Jan 9,10 Thurs	**UNIT I: Matter and Atomic Structure** IA: Introduction to Chemistry		
Week 2 Jan 13-17 Mon, Tue, Thurs	IB: Basic Concepts of Matter IC: The Structure of the Atom ID: Introduction to the Periodic Table	Unit IA, IB Vocabulary	see Moodle
Week 3 Jan 20-24 Mon,Tue, Thurs,	**UNIT II: Structure of Compounds** IIA: The Structure of Compounds IIB: Writing Formulas for Ionic and Molecular Compounds IIB: Writing Formulas for Ionic and Molecular Compounds	Periodic Table Ass't Unit IC, ID Vocabulary Unit I Moodle Quiz	see Moodle see Moodle see Moodle
Week 4 Jan 27-31 Mon, Tue, Thurs	IIB Vespar IIC: Intermolecular Forces **UNIT III: Chemical Nomenclature** IIIB: Chemical Nomenclature (Molecular)	Formulas & Lewis Structures in-class quiz Unit IIA, IIB Vocabulary Unit II Moodle Quiz	see Moodle see Moodle see Moodle
Week 5 Feb 3-7 Mon,Tue, Thurs	IIIA: Valence and Oxidation Numbers IIIB: Chemical Nomenclature (Ionic)	*Chemistry Show-and-Tell Presentations*	*Thurs Feb 6*
Week 6 Feb 6-14 Mon,Tue, Thurs	IIIB: Chemical Nomenclature (Acids) **UNIT IV: Calculations in Chemistry as applied to Gases** IVA: Mathematics in Chemistry IVA: Mathematics of Chemistry+ exam review	Unit IIC, IIIA, IIIB Vocabulary Unit III Moodle Quiz	see Moodle see Moodle
Week 7 Feb 17-21	Family Day- Monday Holiday- Reading Days —no classes		
Week 8 Feb 24-28 Mon, Tue, Thurs	**MIDTERM EXAM (Units I – III)** IVB: Measurements in Chemistry IVC: The Mole Concept	**Midterm Exam (25%)**Unit IVA, IVB Vocabulary	**Mon Feb 24**

Week 9 Mar. 3-7 Mon,Tue, Thurs	IVD: Gas Laws/ ideal IVD: Gas Laws **UNIT V: Calculations in Chemistry as applied to Solutions.** VA: Characteristics of Solutions	Math, moles, measurement ass't Unit IV Moodle Quiz	see Moodle see Moodle
Week 10 March. 10-14 Mon, Tue, Thurs	Unit VA cont VB preparing Solutions VB preparing Solutions	Unit IVC, IVD Vocabulary Solutions in-class quiz	see Moodle
Week 11 March 17-21 Mon,Tue, Thurs,	Unit VC acid base balance VC: Cont	*Kitchen Chemistry Presentations* Unit VA, VB, VC Vocabulary	*March 17* see Moodle see Moodle
Week 12 March.24-28 Mon, Tues, Thurs	VC: Cont **UNIT VI: Chemical Reactions and Stoichiometry** VIA: Writing and Balancing Chemical Equations VIA: cont	Acid-Base Calc's in-class quiz Unit V Moodle Quiz	
Week 13 March 31-April 4 Mon,Tue, Thurs	VIA: cont VIA: cont VIB: Stoichiometry	Balancing & Reactions in-class quiz	see Moodle
Week 14 April 7-11 Mon, Tue, Thurs	Unit VIB- Limiting reagent. Unit VIB- % yield Exam Review	Stoichiometry in class quiz Unit VIA, VIB Vocabulary Unit VI Moodle Quiz	see Moodle see Moodle
Week 15 April 14-17 Mon	Good Friday-college closed. Exam Review	**Chemistry 025 Final Exam (Units IV – VI, 25%)**	**Date TBD by the College**
Week 16 April 22-25	Easter Monday- College closed FINAL EXAMS		

Please Note:

- The date and time allotted to each topic are subject to change.
- Students will have access to their Moodle course shells for 15 days following completion of their course.
- Every effort has been made to ensure that the information in this course syllabus is accurate at the time of publication. Keyano College reserves the right to change the course syllabus content if

it becomes necessary so that course content remains relevant. Any changes to the course syllabus during the semester will be communicated to students in writing by the instructor in a timely manner. A revised course syllabus will be posted to the LMS.

- A minimum GPA of 1.7 or higher is required for students to remain in good academic standing and progress to the next semester, unless otherwise indicated for a specific program.

Keyano Performance Requirements and Student Services

Student Responsibilities

As a student, it is your responsibility to contact the Office of the Registrar to complete the required forms, including the Withdrawal/Drop Form. All forms are available on the College website. Please refer to the important dates listed in the Academic Schedule in the Keyano College credit calendar and/or on the College website. It is the responsibility of each student to be aware of the guidelines outlined in the Student and Academic Policies.

Student Attendance

Class attendance is helpful for two reasons: First, class attendance maximizes a student's learning experience. Second, attending class is an excellent way to keep informed of matters relating to the course administration (e.g., the timing of assignments and exams). Ultimately, you are responsible for your learning and performance in this course. It is the responsibility of each student to be prepared for all classes. Absent students are responsible for the material covered in those classes, and students must ensure they are ready for their next class, including completing any missed assignments and notes.

As Chemistry 025 is designed as a *face-to-face course*, extended or frequent absences *for any reason* can impact your overall mark. Suggestions for handling occasional absences include:

- finding a "classroom buddy" whom you can contact for details regarding what you have missed.
- using Moodle: log into ilearn.keyano.ca to check the Calendar and see slide notes and pre-recorded audio PowerPoint lessons.
- using OneNote: this is the class notebook where I record daily lesson outlines and homework. Search your Keyano email during the first week of classes for an invitation from SharePoint, or use your Keyano credentials to log into onenote.com
- using your Keyanomail to get in touch with me. You will receive responses during office hours.

Chemistry 025 has no laboratory component.

Course Evaluation

Midterm exams and term work is to be completed at the time/date indicated in your course syllabus. It is the expectation of the College that students make every reasonable effort to complete all course evaluation, including, quizzes, midterms, and exams, as scheduled. In the event of an emergency, rescheduling of exams and/or extensions are only provided at the discretion of the course instructor. Students should contact the instructor as soon as they are able, to notify them of missing an evaluative

component. Instructors will use discretion in deciding whether circumstances justify granting a reschedule and/or extension.

Regular term quizzes, midterms, and exams are not eligible for deferral and/or date extension accommodations. Students with accommodations, please refer to Accessibility Services.

Final Exams are subject to deferral processes, please refer to the current Keyano College Credit Calendar.

Academic Integrity & Misconduct

Academic integrity requires commitment to the values of honesty, trust, fairness, respect, and responsibility. It is expected that students at Keyano College will adhere to these ethical values in all activities related to learning, teaching, research, and service. Any action that contravenes this standard, including misrepresentation, falsification, or deception, undermines the intention and worth of scholarly work and violates the fundamental academic rights of members of our community.

Academic dishonesty takes many forms:

- Plagiarism or the submission of another person's work as their own,
- The use of unauthorized aids in assignments or examinations (cheating),
- Using Artificial Intelligence (AI) to complete coursework (without instructor approval),
- Collusion or the unauthorized collaboration with others in preparing work,
- The deliberate misrepresentation of qualifications,
- The willful distortion of results or data,
- Substitution in an examination by another person,
- Submitting unchanged work for another assignment, and
- Breach of confidentiality.

In all academic work, the ideas and contributions of others must be appropriately acknowledged and work that is presented as original must be, in fact, original. Using an AI-content generator (such as ChatGPT) to complete coursework without proper attribution or authorization is a form of academic dishonesty. If you are unsure about whether something may be plagiarism or academic dishonesty, please contact your instructor to discuss the issue.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the *Student & Academic Policies* section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights, Academic Integrity, and Non-Academic Misconduct Policies.

 To ensure your understanding of plagiarism and academic integrity, you are required to complete the online Understanding Academic Integrity tutorial (https://keyano.libwizard.com/f/academic-integrity-tutorial) and submit the certificate of completion to your instructor(s).

Online Learning

Technology and internet connectivity will impact your online learning experience. You may be required to watch online videos, take online quizzes, or participate in live online classes. Live/virtual courses will be hosted in Microsoft Teams or Zoom. For all course delivery types, you will access your course outline, course syllabus and course resources on Keyano's learning management system: Moodle (iLearn). Login in using your Keyano username and password. Keyano College operates in a Windows-based environment and having access to the correct tools for online learning is essential.

Computer System Requirements

Keyano College software are Windows based.

Minimum Requirements and Recommended Upgrades for Windows (preferred system) and Apple devices
These minimum standards are required for a Windows computer/laptop (OS 10 or 11) and a MacIntosh (OS 10.14 or above).
1. Windows 10 Operating System or above.   2. 4GB of RAM. Recommended upgrade to 8GB of RAM.   3. 10GB+ available hard drive storage space. Note installing Microsoft Office 365 requires 3GB of available hard drive space.   a.   Install the Microsoft Office 365 suite (~3GB) *   4. Microphone, webcam, and speakers (All modern laptops have these three accessories built-in). However, a headset or earbuds with a microphone is also recommended.   5. Windows has built-in anti-virus/malware software. It is essential to install system updates to keep your device secured regularly.   *Microsoft Office 365 is free to Keyano students.
Tablets, iPads, and Chromebooks are **not** recommended: They may not be compatible with your programs such as lockdown browsers used for assessments and/or Microsoft Office 365.

Computer Software

Students have access to Microsoft Office 365 and Read & Write for free using Keyano credentials.

See Recommended Technology for more information.

Recording of Lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not share, distribute, or publish any of the lectures or course materials; this includes any recordings, slides, instructor notes, etc., on any platform. Thus, no student is allowed to share, distribute, publish, or sell course-related content without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The Academic Integrity Policy provides additional information on Keyano College's expectations from students as members of the intellectual community.

ITS Helpdesk

If you have issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.

Specialized Supports

Keyano College is committed to Keyano students and their academic success. There is a variety of student support available at Keyano. All student services are available during Keyano business hours: Monday to Friday, 8:30 a.m. to 4:30 p.m. The College is closed on statutory holidays. If you require support outside of regular business hours, please inform the support service team, and they will do their best to accommodate your needs.

Accessibility Services provides accommodations for students living with disabilities. Students with documented disabilities or who suspect a disability can register to discuss their current learning barriers and possible accommodations. Students are required to request accommodations for each term. Please note that requesting accommodations is a process and requires time to arrange. Contact the department as soon as you know you may require accommodations to ensure timely implementation. For accessibility supports, adaptive technology, learning strategies and disability-based funding, please register with Accessibility Services by emailing wellness.services@keyano.ca, or visiting www.wellnessxp.net/wellness/, or scanning this qr code below.

Wellness Services offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators provide a safe and confidential environment for you to seek help with personal concerns. Our Wellness Navigator offers support with finding basic needs such as housing, financial and nutritional support, and outside referrals when needed. Wellness Services welcomes students to participate in group sessions that address topics including mindfulness and test anxiety throughout the academic year. Individual appointments can be made by emailing wellness.services@keyano.ca, or visiting www.wellnessxp.net/wellness/, or scanning this qr code below.

The **Library** provides students with research, information, and educational technology services and spaces as they engage in their studies. The Library is located at CC-166 or www.keyano.ca/library. Library staff are available to help students online and in person throughout the semester. Librarians offer individual and small group consultations booked using the online Book A Librarian calendar. The library also provides virtual research and subject guides to help you with your studies. Find the guide that supports your course-related research by viewing the complete list of online Subject Guides. To start your research and access citation guides (APA, MLA, Chicago, or IEEE), visit the Research Help page. The library's collections (including print and online materials) are searchable using EDS (EBSCO Discovery Service) on www.keyano.ca/library/find. The library offers a Loanable Technology collection to support students accessing and using technology. For an up-to-date list of technology available for borrowing, visit the library's Loanable Technology webpage. For a detailed list of library resources and services, go to www.keyano.ca/library. For all inquiries, please email askthelibrary@keyano.ca or chat with us online.

The **Academic Success Centre (ASC)** provides free academic support services to registered students, such as tutoring, writing support, facilitated study groups, workshops, and study space. Academic Content Specialists are available in Business, Mathematics, Science, English, Humanities, Power Engineering, Upgrading/College Prep, and more. Peer Tutors are available to provide peer academic support to students in all college programs, such as Nursing, Business, Education, Environmental Science, among others. Students are encouraged to visit the Academic Success Centre at CC-119 to discuss strategies for academic success. Specialists in the Academic Success Centre also work with students to develop academic success plans, time management skills, study strategies, and homework plans. For additional information, please email Academic.Success@keyano.ca

Work Integrated Learning (WIL) is located in the ASC in CC-119. Career Services WIL staff assist students with their program-related WIL and co-op placements, provide resume advice, and support with using the GradLeaders platform. Additionally, they coordinate several career fairs for students throughout the academic year and host coop and resume workshops for students. Students can reach WIL by emailing: WIL@keyano.ca or by visiting them in person.

Course Syllabus Template Version 1.0

Signatures & Date

Name of Instructor: Indee Weerakoon

Instructor Signature: _____

Date: 17th December 2024

Name of Course Lead: n/a

Course Lead Signature: _____

Date:

Name of Chairperson/Program Manager: Patricia Collins

Chairperson/Program Manager Signature: _____

Date: Dec. 18/24