# CHM 110 Principles of Chemistry I (19375) Spring 2023

#### Instructor

Dr. Myungshim Kang Email: <u>myungshim.kang@csi.cuny.edu</u> Faculty Office hours: MoTh 5:50 PM-6:50 PM @ 6S-252

#### **Course Hours and Location**

MoTh 6:55 PM - 8:10 PM @ 3S-103

#### **Mode of Instruction**

In person

#### **Course Website**

**CUNY Blackboard** 

#### **Chairperson of Chemistry Department**

Name: Dr. Qiao-Sheng Hu Email: <u>QiaoSheng.Hu@csi.cuny.edu</u> Telephone: 718-982-3901

If there are questions or concerns that you have about this course that you and I are not able to resolve, please feel free to contact the Chair of the department to discuss the matter.

#### **Description**

3 hours; 3 credits. Modern concepts of the atom and chemical bonding, chemical calculations, states of matter, chemistry of water, purification of water, types of solutions, acids and bases, nuclear chemistry, and radioactivity. The concepts necessary for an understanding of our technological society are developed.

## Prerequisite

MTH 020 or an appropriate math placement

## Corequisite

CHM 111 Principles of Chemistry I Laboratory

#### **Required Textbook**

CHM 110/116 Principles of Chemistry Coursepack, Author: CSI Chemistry Department), Publisher: Coursepack, ISBN: 9660202225543 Textbooks can be found at CSI Online Bookstore: <u>https://csi.textbookx.com/</u>.

## **Required Material**

Scientific calculator with logarithm function

## **Course Goals**

The student will learn and apply fundamental principles and tools of chemistry, including structure atoms and molecules, nomenclature, chemical reactions, the periodic table, stoichiometry, and states of matter.

## **Student Learning Outcomes**

- (1) The student demonstrates an understanding of fundamental principles of chemistry.
- (2) The student can apply fundamental principles of chemistry to chemical problems.
- (3) The student can apply basic tools of chemistry and scientific analysis to related fields as well as to everyday situations.
- (4) The student demonstrates analytical and problem-solving skills.

# **Course Requirements and Grading Policy**

Your grades will be based on the following:

Class Participation: 5 %	Homework: 20 %	Semester Exam I, II & III: 45 %
Quizzes: 10 %	Final Exam: 20 %	

Your letter grade will be assigned according to the following guideline: A: 93-100, A-: 90-92, B+: 85-89, B: 80-84, B-: 75-79, C+ 70-74, C 60-69, D 50-59, F below 49

# **Attendance Policy**

You are required to attend each session on time to be counted for attendance. A grade of **WU** will be assigned to a student who is absent in <u>6 or more classes</u> in the semester.

## Homework

Learning chemistry is similar to learning a foreign language where practice is the key. Most students will need to practice additional problems in each topic to have a grasp of that specific topic. Homework assignments for each chapter will be posted on Blackboard. The due dates are listed in the tentative schedule. Each homework is 20 points. Late homework will be accepted but you will receive a penalty by losing <u>10 points per late day</u>.

In addition to the assignment, you should also keep up with the textbook. As you read through each chapter, complete the textbook problems placed within the reading to test yourself to see if you truly understand the reading.

## **Quiz and Exam**

1. Three one-hour semester exams will be given at the regular class hours.

Exam I: Feb. 27 Exam II: Mar. 23 Exam III: Apr. 27

- 2. Four 10-min quizzes will be given at regular class hours during the semester. Quiz dates will be announced in class. Students are allowed to drop one of the quizzes with the lowest score.
- 3. The comprehensive Final Exam will cover the entire semester's work.

- 4. The following exam rules apply in CHM 110:
  - 1) Each quiz or exam will start at the beginning of a class. No extra time will be given.
  - 2) No makeup exams or quizzes will be given.

## **Withdrawal Policy**

According to CSI's Spring 2023 Academic Calendar, the last day to withdraw from a class with the grade of W is May 16, 2023.

## **CUNY Policy on Academic Integrity**

Academic dishonesty is prohibited in The City University of New York. Penalties for academic dishonesty include academic sanctions, such as failing or otherwise reduced grades, and/or disciplinary sanctions, including suspension or expulsion. This policy also defines example of academic dishonesty: cheating, plagiarism, obtaining unfair advantage, and falsification of records and official documents. The read the full policy, please visit the following website:

https://www.csi.cuny.edu/sites/default/files/pdf/privacy/cuny\_academic\_integrity.pdf

All students are expected to follow the CUNY policies related to academic integrity. You must work independently on your quiz, homework and exams. Students who receive or give any help during a quiz, or examination are considered cheating and will automatically receive a **grade of F** for the course. Also, any academic dishonesty will be reported to the college authority.

## **Behavior**

Every student is entitled to full participation in class without interruption. All students are expected to attend classes and be prepared to begin on time. Disruption of class by inconsiderate behavior will NOT be tolerated. Repeated violations will be penalized and may result in expulsion from class.

## **Reasonable Accommodations and Academic Adjustments**

The City University of New York, in compliance with Section 504 of the Federal Rehabilitation Act of 1973 ("Rehabilitation Act"), the Americans with Disabilities Act of 1990 ("ADA"), New York State Executive Law §296, and New York City Human Rights Law, provides qualified individuals with disabilities the opportunity to participate in programs, activities, or employment. For more information and access to the full policy please visit: <u>https://www.csi.cuny.edu/about-csi/diversity-csi/office-diversity-compliance/reasonable-accommodations-and-academic-adjustments</u>

## **Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe that you have a disability requiring an accommodation, please contact the Center for Student Accessibility at 718.982.2510/ <u>CSA@csi.cuny.edu</u>. For more information please visit: <u>www.csi.cuny.edu/csa/</u>. You must notify your instructor about the accommodation at the beginning of the semester.

# **Campus (Cix) Email**

Students are expected to check their campus (cix) email regularly. Students must recognize that certain communications, may be time-sensitive, and they may be required to monitor email on a more frequent basis than determined by instructional needs. If students have issues accessing their campus (cix) email please email the <u>helpdesk@csi.cuny.edu</u> or visit the <u>Virtual Computer Lab</u>.

# **Tutoring and Academic Assistance**

The College offers tutoring to students, free of charge. For a complete list of the Tutoring Centers please visit <a href="https://www.csi.cuny.edu/students/academic-assistance/tutoring">https://www.csi.cuny.edu/students/academic-assistance/tutoring</a>. The Chemistry Department will also provide free tutoring (TBA).

## **Technical Help for Blackboard**

If you need help with Blackboard and other technology required for the course, please contact Office of Information Technology Services HelpDesk by email: <u>Helpdesk@csi.cuny.edu</u>, phone: 1-718-982-HELP (4357) or website: <u>Help Support and Resources</u>.

## **Subject to Change Statement**

This syllabus and course calendar/schedule are subject to change in the event of extenuating circumstances.

# **Tentative Schedule**

Approx.	Topics	Reading	Quiz/Exam	Homework
Dates				
Jan. 26	The Language of Chemistry	Chapter 1		
Jan. 30				
Feb. 2				
Feb. 6	Atomic Structure	Chapter 2		
Feb. 9			Quiz 1: Ch. 1	Homework 1
Feb. 16				
Feb. 21	Molecules and Chemical bonds	Chapter 3		
Feb. 23				Homework 2
Feb. 27			Exam I: Chs. 1-2	
Mar. 2				
Mar. 6	Chemical Calculations	Chapter 4		
Mar. 9			Quiz 2: Ch.3	Homework 3
Mar. 13				
Mar. 16	The Physical Properties of Gases	Chapter 5		
Mar. 20				Homework 4
Mar. 23			Exam II: Chs. 3-4	
Mar. 27	Interaction between Molecules	Chapter 6		
Mar. 30				Homework 5
Apr. 3	Solutions	Chapter 7		
Apr. 17			Quiz 3: Ch.6	Homework 6
Apr. 20	Chemical Reactions	Chapter 8		
Apr. 24				Homework 7
Apr. 27			Exam III: Chs. 5-7	
May 1	Acids, Bases, and Buffers	Chapter 9		
May 4			Quiz 4: Ch.8	Homework 8
May 8				
May 11	Chemical & Biological Effects of Radiation	Chapter 10		Homework 9
May 15				
(May 17-			Final Exam: Chs. 1-10	Homework 10
23)				(due May 16)

# **Student agreement**

I have read the syllabus for CHM 110 Spring 2023 (19375) and I agree to abide by all policies and requirements stated in the syllabus.

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_