# CHM 141 General Chemistry I Section 19426 Syllabus

#### INTRODUCTION TO COURSE AND INSTRUCTOR

Semester Spring 2023	Program/Department Chemistry		
Course Name General Chemistry I	Instructor Name Hong-Bin Yu		
Credits and Hours 3 credits 3 lecture hours + 1 recitation hour	<b>Office Location</b> 6S-228 <b>Phone</b> 718-982-3952		
Mode of Instruction In person	Office Hours Mon. Wed.10:00am-11:30am.		
<i>Time</i> Mon. Wed. 12:20 PM- 2:15 PM	Ved. 12:20 PM- 2:15 PM		
Location 6S-138	Course Website CUNY Blackboard		
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.			
CHAIR/PROGRAM DIRECTOR'S NAME	Qiao-Sheng Hu		
DEPARTMENT NAME	Chemistry		
CHAIR/PROGRAM DIRECTOR'S EMAIL	Qiaosheng.Hu@csi.cuny.edu		
DEPARTMENT/PROGRAM PHONE NUMBER	718-982-3900		

#### COURSE DESCRIPTION AND PRE/COREQUISITES

A study of the fundamental principles and laws concerning the structure and behavior of matter. The first semester covers atomic and molecular structure, chemical bonding, reactions, stoichiometry, and the gaseous, liquid, and solid states of matter.

Pre-requisites: One-year of high school chemistry or (CHM 100 and CHM 101)

#### REQUIRED COURSE MATERIALS

- Textbook: Chemistry and Chemical Reactivity, 10th Ed. + OWLv2 with eBook access, Kotz, Treichel, Townsend, Treichel ISBN: 9780357001172
- Online homework OWLv2 access with eBook (see homework section)
- Internet access
- CUNY Blackboard Access
- Scientific calculator with logarithm function

#### **COURSE GOALS**

- The student will comprehend how Chemistry is important and relevant in daily life.
- The student will learn and apply basic tools of Chemistry and Scientific Analysis, including the periodic table, stoichiometry, and states of matter.

- The student will learn and apply fundamental principles of structure and bonding in atoms and molecules.
- The student will learn and apply introductory chemical thermodynamics.
- The student will demonstrate analytical and problem solving skills.

#### COURSE REQUIREMENTS/ASSIGNMENTS

# **Exams and Quizzes:**

• **Exam:** Three in person exams are given at the regular class hour. The exams count as 40% of the course grade. You are allowed to drop one exam score. No makeup exam will be given.

**Tentative Exam Dates:** Exam 1: February 22

Exam 2: March 20 Exam 3: April 21

- **Quiz**: Four quizzes will be given at regular class hours. The date of the quiz will be announced in class. You are allowed to drop one quiz score. Quizzes count as 20% of the grade. No makeup quiz will be given.
- **Final Exam**: The in person comprehensive final exam (**May 18**) covers the entire semester's work and counts as 25% of the grade. No makeup final exam will be given.

#### Homework:

Learning chemistry is similar to learning a foreign language where practice is the key. You must complete the assignments on time to receive the credit. Online homework assignments are recommended by the chemistry department. It is on Cengage website. You need to buy the access code which will also come with an e-textbook, or purchase the NEW in-print textbook to get free online homework access. It is highly recommended that you finish the corresponding assignment after each lecture. You are expected to spend average 4-6 hours on each chapter homework. Homework assignment counts 15% of the grade. Late homework will not be accepted.

You must use the following online course key to access the online course homework.

#### Online COURSE KEY: E-XT9WYJFDG88NS

Students of this course need to go to the following to enroll.

Use the *OWLv2* registration link: <a href="https://www.cengage.com/dashboard/#/course-confirmation/E-XT9WYJFDG88NS/initial-course-confirmation">https://www.cengage.com/dashboard/#/course-confirmation/E-XT9WYJFDG88NS/initial-course-confirmation</a>

#### **GRADING POLICY AND EVALUATION**

The course final grade is based on the homework and exam scores.

Exam	40%
Quiz	20%
Final Exam	25%
Homework	15%

#### TENTATIVE COURSE CALENDAR/SCHEDULE

The following is a tentative outline of the lecture schedule for CHM 141. Students are strongly advised to read the corresponding chapter in the textbook before attending the lecture. Students cannot learn chemistry only by watching their instructor do it. Practice is very helpful to understand the principle. It is very important to get a good start and not fall behind.

Lesson	Topic	Reading
Lesson 1, 2	Basic Concepts of Chemistry	Chapter 1
Lesson 3, 4	Atoms, Molecules and Ions	Chapter 2
Lesson 5, 6, 7	Quiz 1, Continue on Chapter 2	Chapter 2
Lesson 8	Exam 1 Chapter 1, 2	
Lesson 9, 10	Chemical Reactions	Chapter 3
Lesson 11	Quiz 2, Stoichiometry: Quantitative information	Chapter 4
Lesson 12, 13, 14	about chemical Reactions	Chapter 4
Lesson 15	Exam 2 Chapters 3, 4	
Lesson 16, 17	Gas and Their Properties	Chapter10
Lesson 18	Quiz 3 Principle of Chemical Reactivity:	Chapter 5
Lesson 19, 20	Chapter 5	
Lesson 21	Exam 3 Chapters 10, 5	
Lesson 22,	The Structure of Atoms	Chapter 6
Lesson 23, 24	The Structure of Atoms and Periodic Trends	Chapter 7
Lesson 25	Quiz 4 Bonding and Molecular Structure	Chapter 8
Lesson 26, 27	Bonding and Molecular Structure	Chapter 8
Lesson 28	Lesson 28 Bonding and Molecular Structure: Orbital Hybridiza	
		Chapter 9

Final Exam Chapters 1-10

## **SUBJECT TO CHANGE STATEMENT**

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

#### **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. Please visit the following website to read the full policy: <a href="https://www.csi.cuny.edu/sites/default/files/pdf/privacy/cuny\_academic\_integrity.pdf">https://www.csi.cuny.edu/sites/default/files/pdf/privacy/cuny\_academic\_integrity.pdf</a>

#### REASONABLE ACCOMODATIONS 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: <a href="https://www.csi.cuny.edu/about-csi/diversity-csi/office-diversity-compliance/reasonable-accommodations-and-academic-adjustments">https://www.csi.cuny.edu/about-csi/diversity-csi/office-diversity-compliance/reasonable-accommodations-and-academic-adjustments</a>

#### 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/ CSA@csi.cuny.edu. For more information please visit: www.csi.cuny.edu/csa/.

#### 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>

#### **COURSE POLICIES**

Attending every class is one of your learning commitments as a college student. Your attendance will be recorded. If you miss 15% (two days of summer class) or more of class hours, you will automatically receive a **WU** (Withdraw Unofficially) grade. If you are absent from class, it is your responsibility to check on announcements made while you were away. No makeup tests will be given. A missed test will be counted as a zero score.

According to CSI Academic Calendar, the last day to withdraw with the grade of "W" is May 16, 2023.

### **CAMPUS (CIX) EMAIL**

Students are expected to check 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 <a href="mailto:helpdesk@csi.cuny.edu">helpdesk@csi.cuny.edu</a> or visit the <a href="mailto:Virtual">Virtual</a> Computer Lab.

Lecture notes and general announcements will be posted on Blackboard. If you are from another school, make sure your email address on Blackboard is up to date. All announcements will be either announced in class or emailed through Blackboard.