CHM 107 Chemistry for Today I Lab Spring 2023 (Section 19178)

Instructor

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

Course Hours and Location

Thu 9:05 AM - 11:00 AM at 6S-247

Mode of Instruction

In-person

Course Website

CUNY Blackboard

Chairperson of Chemistry Department

Name: Dr. Qiao-Sheng HuEmail: QiaoSheng.Hu@csi.cuny.eduTelephone: 718-982-3900If 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.

Credits and Hours

2 laboratory hours; 1 credit.

Course Description

Laboratory experiences illustrating principles and topics discussed in CHM 106 (scientific analysis).

Pre- or Corequisite

CHM 106

Required Text Book

CHEMISTRY 107 Chemistry for Today Coursepack, Author: College of Staten Island, Publisher: Coursepack, ISBN: 9660202226274

The lab manual can be purchased at CSI Online Bookstore: https://csi.textbookx.com/.

Required Materials

Lab safety goggles, calculator

Students Learning Outcomes

The student performs experiments safely in a chemical laboratory and knows how to interpret the results of experiments.

Course Goals

(1) The student will learn how to work safely in a chemical laboratory.

(2) The student will demonstrate knowledge of the use of chemical experimental setups and basic lab techniques and skills.

- (3) The student will be able to make observations and take lab notes.
- (4) The student will be able to collect and analyze data.

Attendance

You are required to attend each class **on time**. A discussion of each experiment will be provided before you start the experiments.

No make-up lab and exam will be arranged. Lateness is not acceptable.

You need to complete the experiments during the class hour in order to receive credit for the course.

If you miss two lab classes, you will receive an **F grade** regardless your final score of the course.

Withdrawal Policy

According to CSI's Fall 2021 Academic Calendar, the last day to drop a course with the grade of W is December 13, 2022.

Course Requirements and Grading Policy

Your grades will be based on the following:

10% Prelab quiz 50% Lab report sheets & questions

10% Midterm Exam 25% Final Exam

5 % Attendance (including not being late) and participation If you are consistently late or missing from the lab mid experiment you will not get credit for this part.

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 The grading above is subject to change.

Lab Report Sheets & Questions

Your lab report is **due at the beginning of the next class**. The lab report should be scanned and submitted in **a single PDF** to the Blackboard. Late reports will be accepted, but you will receive a **penalty by losing 20 points per late day**. Grading is based on 100-point scale. Reports must include:

(1) Cover sheet or title page (typed): write your name and lab partner's name, title of experiment, date of experiment.

(2) Data sheet (hand-written): write your result directly on the report sheet within the lab period and be checked by the instructor before you leave the lab. Write formulas, calculations and units neatly if needed.(3) Questions (hand-written): answer questions from each lab experiment in the manual.

Notes:

1. If you are absent then you do not submit the lab report for that experiment (your grade will be zero). No make-up labs will be arranged. You are responsible for the material when you are absent. It is

recommended that you obtain data from a classmate and perform the calculation and answer questions as preparation for exams.

2. Lab reports are to be done **individually**. Calculations and questions which are worked with other persons shall be graded **F**.

Pre-lab Quiz

The pre-lab quiz will be held **at the beginning of the class**. **No late pre-labs will be accepted**. Being prepared for a science lab is essential. You should read the lab manual contents to know the objective, background and procedure of the experiment before you attend the lab course.

You can get extra credit by submitting hand-written procedure of the next experiment along with your report on the Blackboard.

Midterm Exam and Final Exam

One Midterm Exam will be given in class on **March 2**. After the midterm exam, we will continue the regular experiment.

There will be a departmental Final Exam in the final week (May 17 -23).

No make-up exams will be arranged.

Safety

Safety is extremely important in chemistry laboratory. You should be aware of the safety policies and practices in your laboratory manual safety section **Pages 1-10**. You must sign the Chemistry Laboratory Safety Agreement before you perform any experiment in the lab.

Safety goggles should be worn at any period of the class. You are not allowed to be in the laboratory without wearing the safety goggle. Gloves should be worn when you handle any chemicals.

It is extremely important for you to read the procedures carefully before you enter the lab to prevent any unnecessary accidents and property damages. Attending the lecture is mandatory because the lab instructor will provide important safety issues for each lab.

Shirts should cover your torso. Shorts and short skirts are not allowed. Long pants are preferable. No loose clothing or scarves. Shoes must completely cover your feet. No flip-flops, sandals, crocs, etc. Sneakers are the best footwear for lab.

No eating, drinking, chewing or applying lip balm in the lab.

Students who fail to follow this rule will be asked to leave the lab and will suffer grading penalties. You will be deducted 1 point for each violation from your final score.

Attitude

Every student is entitled to full participation in class without interruption. Disruptive behavior is unacceptable in the lab, and will NOT be tolerated. Late arrival, noisy devices, and inconsiderate behavior, will not be tolerated. Discussion of scientific issues is highly welcome to advance our knowledge, but emotional arguments and quarrels are prohibited. Repeated violations will be penalized and may result in expulsion from class.

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 pre-labs, data sheet/calculation and post-labs. You shouldn't copy any other person's work including any online resources as your own. Students must work independently on all exams. Any forms of cheating or plagiarism in lab report or tests will result in a zero point for your assignment and may result an **F grade** of the course. Also, any academic dishonesty will be reported to the college authority.

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> or visit the Center at 1P-101. 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 <u>https://www.csi.cuny.edu/students/academic-assistance/tutoring</u>. The Chemistry Department will also provide free tutoring (TBA).

Subject to Change Statement

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

Lab Schedule

| Week | Date | Experiment | Pre-lab/ Exams | Reports | Due dates |
|------|------|--|------------------------------|-----------|--------------|
| 1 | 1/26 | Check In & Laboratory Procedures, Safety Orientation | | | |
| 2 | 2/2 | Alchemy – Copper to Silver to Gold | Pre-lab 2 | Report 2 | 2/9 |
| 3 | 2/9 | Physical and Chemical Properties of Elements and Compounds | Pre-lab 3 | Report 3 | 2/16 |
| 4 | 2/16 | Chromatographic Separation of Analgesic Tablets | Pre-lab 4 | Report 4 | 2/23 |
| 5 | 2/23 | Whiter than White | Pre-lab 5 | Report 5 | 3/2 |
| 6 | 3/2 | Preparation of a Beauty Cream | Pre-lab 6 Midterm exam | Report 6 | 3/9 |
| 7 | 3/9 | Preparation of Soap | Pre-lab 7 | Report 7 | 3/16 |
| 8 | 3/16 | Wetter Water | Pre-lab 8 | Report 8 | 3/23 |
| 9 | 3/23 | Preparation of Aspirin | Pre-lab 9 | Report 9 | 3/30 |
| 10 | 3/30 | Determining the Molecular Weight of Aspirin | Pre-lab 10 | Report 10 | 4/20 |
| 11 | 4/20 | Acids and Bases [pH Meter Test (Demonstration)] | Pre-lab 11 | Report 11 | 4/27 |
| 12 | 4/27 | Enzymes: Biochemical Catalysts | Pre-lab 12 | Report 12 | 5/4 |
| 13 | 5/4 | Plastics (Polymers) A) Preparation of Nylon B) Testing of Plastics (Demonstration) | Pre-lab 13 | Report 13 | 5/11 |
| 14 | 5/11 | Check out | | | |