CHM 111 Principles of Chemistry I Lab (Section 19361) Spring 2023

Instructor

A. Tandilashvili Email: Alla.Tandilashvili@csi.cuny.edu Faculty Office hours: Monday 7:45 pm- 8:15 pm; Thursday 7:45 pm – 8:15 pm in room 6S-252

Course Hours and Location

Monday 8:20 PM - 10:00 PM at 6S-247

Mode of Instruction

In-person

Course Website

CUNY Blackboard

Required Text Book

CHM 111: CHEMISTRY 111 Principles Of Chemistry I Coursepack

Required Materials

Lab goggles, calculator

Description

Experiments illustrating principles studied in CHM 110

Credits and Hours

2 laboratory hours; 1 credit.

Prerequisite

MTH 020 or appropriate math placement

Corequisite

CHM 110

Chairperson of Chemistry Department

Name: Dr. Qiao-Sheng Hu Email: <u>QiaoSheng.Hu@csi.cuny.edu</u> Telephone: 718-982-3900 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.

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
- (3) The student will be able to collect and analyze data
- (4) The student will communicate his or her findings by writing concise reports

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 Spring 2023 Academic Calendar, the last day to drop a course with the grade of W is May 16, 2023.

Course Requirements and Grading Policy

Your grades will be based on the following: 10% Prelab 50% Lab report - lab data sheet and questions 10% Midterm Exam 20% Final Exam 10% Attendance & participation

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 Reports

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, title of experiment, date of experiment.

(2) Data sheet (hand-written): Write your result directly on the data sheet on the day of experiment. 20 points if applicable.

(3) Calculations (hand-written): Write formulas, calculations and units neatly in a separate sheet. 30 points if applicable.

(4) Post lab questions (hand-written): Answer questions from each lab experiment in the manual. 50 points if applicable.

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 Assignment

The online pre-lab assignment is **due at the beginning of the class (on the day you perform the experiment)**. **No late pre-labs will be accepted**. Please read the experiment on the lab manual before coming to class.

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

Midterm Exam and Final Exam

One Midterm Exam will be given in class (March 9 - tentative). There will be a departmental Final Exam in the final week (May 17-23). No make-up and 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 **Page 1-10**. You must sign the lab 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. 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

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.

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/ CSA@csi.cuny.edu or visit the Center at 1P-101. For more information please visit: www.csi.cuny.edu/csa/. 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>

Subject to Change Statement

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

Lab Schedule

Week D	Date Experiment	nt	Pre-lab/ Exams	Reports	Due dates
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1	1/30	Safety Orientation			
2	2/06	2. Density Determination	Pre-lab 2	Report 2	2/21
3	2/21	3. Chemical Change: Heat Energy	Pre-lab 3	Report 3	2/27
4	2/27	 A) Physical and Chemical Properties and Changes/ B) Evidence of Chemical Reaction 	Pre-lab 4	Report 4	3/06
5	3/06	5. Conservation of Mass during a Chemical Change	Pre-lab 5	Report 5	3/13
6	3/13	 6. A) Effect of Heat & Catalysts: Preparation of Oxygen B) Effect of Concentration of Reactants on Rate of Reaction: Properties of Oxygen 	Pre-lab 6	Report 6	3/20
7	3/20	7. Mass Relationship in Chemical Changes	Pre-lab 7 Midterm exam	Report 7	3/27
8	3/27	8. Effecting of Limiting the Concentration of a Reactant	Pre-lab 8	Report 8	4/03
9	4/03	9. Charles's Law	Pre-lab 9	Report 9	4/1 7
10	4/17	10. Test for Various lons	Pre-lab 10	Report 10	4/24
11	4/24	11. A) Reaction of Hydronium lonsB) Predicting Reactions Using Solubility Rules(Complete predictions before coming to lab)	Pre-lab 11	Report 11	5/01
12	5/01	12. Acid-Base Titration: Analysis of Commercial Vinegar	Pre-lab 12	Report 12	5/0 8
13	5/08	13. Determination of pH	Pre-lab 13	Report 13	5/15

14	5/15	Review		