



蘇州大學
Soochow University

CHM 110 General Chemistry

Summer 2023

Course Credits: 4

Contact Hours: 55 hours

Instructor: TBA

Email: TBA

COURSE OBJECTIVES

General Chemistry is the very preliminary course for students who are going to have further interest or study in related field. It provides an introduction to the fundamental concepts and principles of chemistry, including Chemistry and Measurement, Atoms, Molecules, and Ions, Calculations with Chemical Formulas and Equations, Equilibrium, Chemical Reactions, properties of matter, etc. Students will learn the basic concepts and calculations in chemistry and how to use them to describe matter.

Upon Completion of this Course, students will be able to:

1. Review basic theories and concepts in chemistry;
2. Demonstrate proficiency in the basic calculations used in chemistry;
3. Study the rates of various reactions;
4. Connect and apply chemistry concepts and theories to real life;
5. Communicate fluently within the work environment and work in team.

PREREQUISITES

N/A

GRADING

Grades will be determined by accumulating points, with 100 points being the maximum, as follows:

ITEM

POINTS



Quizzes	30 Points
Midterm	30 Points
Final Exam	40 Points
Total	100 Points

Late submissions will be graded at the end of the course. Grades will be assigned according to the following rule:

$$A \geq 90 > B \geq 80 > C \geq 70 > D \geq 60 > F.$$

We reserve the right to make adjustments to the overall grading policy.

COURSE MATERIALS

Required Texts:

General Chemistry by Darrell D. Ebbing, Steven D. Gammon, 11th Edition, GENGAGE Learning, 2013.

Recommended (Optional) Texts or Other Materials:

None

COURSE TOPICS

MODULE	TASKS
Module 1	Topics: Topic 1: Chemistry and Measurement Topic 2: Atomic Theory and Atomic Structure Topic 3: Elements and Compounds Topic 4: The Gaseous State Topic 5: Thermochemistry Assessments: Quiz#1
Module 2	Topics: Topic 6: Quantum Theory of the Atom Topic 7: Electron Configurations and Periodicity Topic 8: Ionic and Covalent Bonding Topic 9: States of Matter; Liquids and Solids Topic 10: States of Matter; Liquids and Solids(Cont.) Assessments: Quiz#2



Module 3	Topics: Topic 11: Calculations with Chemical Formulas and Equations Topic 12: Calculations with Chemical Formulas and Equations (Cont.) Topic 13: Chemical Reactions Topic 14: Rates of Reaction Topic 15: Chemical Equilibrium Assessments: Midterm
Module 4	Topics: Topic 16: Acid-Base React Topic 17: Acid-Base Equilibria Topic 18: Solubility and Complex-Ion Equilibria Topic 19: Thermodynamics and Equilibrium Topic 20: Thermodynamics and Equilibrium(Cont.) Assessments: Quiz#3
Module 5	Topics: Topic 21: Oxidation-Reduction Reactions Topic 22: Electrochemistry Topic 23: Chemistry of the Main-Group Elements Topic 24: Organic Chemistry Topic 25: Organic Chemistry(Cont.) Assessments: Final Exam

ATTENDANCE

1) Class attendance is required. Missing classes without permission will lead to decrease in overall grade.

Missing less than two classes: no penalty.

Missing more than two classes: 7% will be taken off from the overall grade.

If the instructor reports a student's frequent missing of class to the Soochow University Academic Administration Office, the student might get a written warning and might be prohibited from attending final exam.

2) Participants in this course are expected to arrive in class promptly and adequately prepared. The primary objective of this course is to critically engage with the readings and the subject matter. Therefore, course participants are expected to have completed the reading prior to class and prepare thoughtful reflections/commentaries to share with fellow colleagues.



LEARNING REQUIREMENTS

- 1) Late assignments are not acceptable and are subjected to grade deductions.
- 2) Assignments submitted in the wrong format will be counted as not submitted.
- 3) Failure to submit or fulfill any required course component results in failure of the class.
- 4) Make-up for midterm and final exams only with valid excuses, as defined by the University.
- 5) In order to earn a Certificate of Completion, participants must thoughtfully complete all assignments by stated deadlines and earn an average quiz score of 50% or greater.

TECHNOLOGY POLICY

The use of electronic devices in class is distracting, both for the user and for the rest of the class. Only non-programmable calculators can be used in the tests and exam. Any attempts to use cell phones and other electronic communication devices will be seemed as cheating. Laptops are discouraged, unless you use them for activities DIRECTLY related to the course (eg., note taking, reading course documents).

ACADEMIC INTEGRITY POLICY

Soochow University highly values the academic integrity and aims to promote the academic fairness, honesty and responsibility. Any academic dishonesty behaviors and any attempts to cheats and plagiarism will be reported to the university administration office. A written warning and the relevant penalties will be imposed. The record might be shown on the official university transcript.

DISABILITY ACCOMMODATION

Soochow University is committed to maintaining a barrier-free environment so that students with disabilities can fully access programs, courses, services, and activities at Soochow University. Students with disabilities who require accommodations for access to and/or participation in this course are welcome.

Note:



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Please contact the University Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material.