Chemical Principles II

Last Updated: Tue, 12/16/2025

Course prefix: CHEM

Course number: 1212K

Section: A

CRN
25883

Instructor first name: Carrie

Instructor last name: Shepler

Semester: Spring

Academic year: 2026

Course description:

This course is the second of a two-semester sequence that introduces the foundational concepts of chemistry. General topics covered in lecture include chemical kinetics, chemical equilibrium, acids and bases, buffers and titrations, electrochemistry, coordination chemistry, and fundamental principles of main-group chemistry. Laboratory focuses on fundamental lab skills as well as analytical and synthetic chemistry. The laboratory component is designed to develop your experimental skills as you collect and evaluate evidence for the concepts, principles, and theoretical models discussed in lecture.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit: http://www.catalog.gatech.edu/policies/honor-code/ or http://www.catalog.gatech.edu/rules/18/.

If you have question involving the Academic Honor Code at any time during the semester, then please contact your instructors or other first-year program faculty member. We are happy to clarify policies and help you navigate your academic experience with integrity.

Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Each exam will list academic integrity guidelines (these also will be posted prior to each exam). Each exam will include an honor code statement that all students must confirm or deny.

Core IMPACTS statement(s) (if applicable):

This is a Core IMPACTS course that is part of the STEM area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I ask scientific questions or use data, mathematics, or technology to understand the universe?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Inquiry and Analysis
- Problem-Solving
- Teamwork