# JAMESTOWN COMMUNITY COLLEGE

**State University of New York** 

## INSTITUTIONAL COURSE SYLLABUS

Course Title: General Chemistry II

Course Abbreviation and Number: CHE 1560 Credit Hours: 4 Course Type: Lecture/Lab

**Course Description:** A continuation of CHE 1550, students will investigate intermolecular forces in solids and liquids, solutions, kinetics, equilibrium, acids and bases, thermodynamics, electrochemistry, and nuclear reactions.

Prerequisite: CHE 1550; Prerequisite/Corequisite: MAT 1600 or higher, (or Eligibility: MAT 1710).

#### **General Education Requirements Met**

SUNY JCC

Natural Sciences Scientific Reasoning

### **Student Learning Outcomes:**

Students who demonstrate understanding can:

- 1. Write formal scientific laboratory reports that involve measurements, scientific reasoning, data analysis, and drawing conclusions from observations and data.
- 2. Develop problem-solving skills and complete calculations with regards to kinetics, equilibrium, acids/bases, thermodynamics, and electrochemistry.
- 3. Demonstrate an understanding of the methods scientists use to explore natural phenomena, including observation, hypotheses development, measurement and data collection, experimentation, evaluation of evidence, and employment of data analysis or mathematical modeling. [SUNY Gen Ed Natural Sciences]
- 4. Application of scientific data, concepts, and models in one of the natural sciences. [SUNY Gen Ed Natural Sciences]

#### **Topics Covered:**

- Gases
- Intermolecular Forces, Liquids, and Solids
- Properties of Solutions
- Chemical Kinetics
- Chemical Equilibrium

- Acid-Base
- Chemical Thermodynamics
- Electrochemistry
- Nuclear Chemistry

#### **Information for Students**

- Expectations of Students
  - Civility Statement
  - Student Responsibility Statement
  - Academic Integrity Statement
- Accessibility Services

Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.

- Get Help: JCC & Community Resources
- Emergency Closing Procedures
- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

A=4.0 B+=3.5	B=3	C+=2.5	C=2	D+=1.5	D=1	F=0
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• Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

Effective Date: Fall 2023