JAMESTOWN COMMUNITY COLLEGE
State University of New York
INSTITUTIONAL COURSE SYLLABUS

Course Title: General Chemistry 2 Lecture

Course Abbreviation and Number: CHE 1561 Credit Hours: 3 **Course Type: LR**

Course Description: A continuation of General Chemistry 1, this course delves deeper into the principles of chemistry. Topics include intermolecular forces in solids and liquids, properties of solutions, chemical kinetics, dynamic equilibrium, acids and bases, thermodynamics, electrochemistry, and nuclear reactions. This course is intended for science majors and serves as a foundation for upper-level chemistry studies.

Prerequisite: CHE 1551+1552; Corequisite: MAT 1590 or Eligibility: MAT 1600; Corequisite: CHE 1562

General Education Requirements Met:

SUNY	**JCC**
Natural Sciences	Scientific Reasoning

Student Learning Outcomes:
Students who demonstrate understanding can:

1. Analyze and explain the role of intermolecular forces in determining the physical and chemical properties of solids, liquids, and solutions.
2. Apply principles of kinetics, equilibrium, thermodynamics, and electrochemistry to predict and interpret chemical behavior and reactions, including acid-base and nuclear processes.
3. Integrate Mathematical Tools to Solve Chemical Problems.
4. Application of scientific data, concepts, and models in one of the natural sciences. [SUNY Gen Ed – Natural Sciences SLO 2]

Topics Covered:

- Properties of Liquids/Solids
- Phase Transitions
- Chemistry of Solutions
- Chemical Kinetics
- Reaction Mechanisms
- Equilibrium
- Acids/Bases
- Solubility
- Thermodynamics
- Electrochemistry
- Nuclear Chemistry

Information for Students:

- Expectations of Students
  - Civility Statement
  - Student Responsibility Statement

- Academic Integrity Statement

- Accessibility Services: https://www.sunyjcc.edu/accessibility
- Get Help: https://www.sunyjcc.edu/gethelp
- Emergency closings: https://www.sunyjcc.edu/jccalert
- Course grades are 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:

Letter Grade	A	B+	B	C+	C	D+	D	F
Numerical Grade	4.0	3.5	3	2.5	2	1.5	1	0

- 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 Term: Fall 2026