

JAMESTOWN COMMUNITY COLLEGE
State University of New York
INSTITUTIONAL COURSE SYLLABUS

Course Title: Organic Chemistry 2 Lecture

Course Abbreviation and Number: CHE 2541

Credit Hours: 3

Course Type: LR

Course Description: This course is a continuation of Organic Chemistry I, emphasizing the structure, reactivity, and synthesis of more complex organic molecules and multi-step reactions. Topics include aromaticity, electrophilic aromatic substitution, aldehydes, ketones, carboxylic acids and their derivatives, amines, and selected biologically relevant molecules. This course is designed for science majors, pre-medical, pre-pharmacy, and other health-related professional tracks.

Prerequisite: CHE 2531+2532; Corequisite: CHE 2542.

General Education Requirements Met:

SUNY

JCC

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Analyze and predict the reactivity of aromatic and carbonyl-containing compounds and apply mechanistic reasoning to design and evaluate multi-step synthetic pathways.
2. Analyze how molecular structure affects the function and reactivity of organic molecules in biological systems.

Topics Covered:

- Substitutions and Elimination Reactions
- Alcohols and Ethers
- Addition Reactions
- Enolates and Carbonyls
- Conjugated Systems
- Benzenes
- Amines
- Macromolecules

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