

# COURSE SYLLABUS

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|---------------------------|---|
| <b>LAST REVIEW</b>        | Spring 2021   |
| <b>COURSE TITLE</b>       | Organic Chemistry II Lab  |
| <b>COURSE NUMBER</b>      | CHEM-0214   |
| <b>DIVISION</b>           | Math, Science, Business and Technology                                |
| <b>DEPARTMENT</b>         | Chemistry   |
| <b>CIP CODE</b>           | 24.0101   |
| <b>CREDIT HOURS</b>       | 2   |
| <b>CONTACT HOURS/WEEK</b> | Lab: 4  |
| <b>PREREQUISITES</b>      | Organic Chemistry I, CHEM-0211 and Organic Chemistry I Lab, CHEM-0213 |

**COURSE PLACEMENT** Students must meet the correct placement measure for this course. Information may be found at:  
<https://www.kckcc.edu/admissions/information/mandatory-evaluation-placement.html>

## COURSE DESCRIPTION

The emphasis of this continuation of Organic Chemistry I Lab, CHEM-0213, is on organic synthesis and identification.

## TEXTBOOKS

<http://kckccbookstore.com/>

## METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

## COURSE OUTLINE

- I. Oxidation and Reduction of Alcohols
- II. Reduction of ketones and aldehydes
- III. Nucleophilic Substitution Reactions
- IV. Aromatic Substitution Reactions
- V. Aldol Condensation
- VI. Esterification and Hydrolysis
- VII. Synthesis

## **COURSE LEARNING OUTCOMES**

Upon successful completion of this course, the student will:

- A. Be able to perform common techniques in reactions of a variety of functional groups and multistep syntheses.
- B. Be able to perform hands-on reactions of a variety of functional groups.
- C. Be able to develop knowledge and experience with organic syntheses.
- D. Be able to perform laboratory techniques necessary for analysis and identification of organic compounds.

## **ASSESSMENT OF COURSE LEARNING OUTCOMES**

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

## **COLLEGE POLICIES AND PROCEDURES**

*Student Handbook*

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

*College Catalog*

<https://www.kckcc.edu/academics/catalog/index.html>

*College Policies and Statements*

<https://www.kckcc.edu/about/policies-statements/index.html>

*Accessibility and Accommodations*

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.