

COURSE SYLLABUS

LAST REVIEW	Spring 2021
COURSE TITLE	Organic Chemistry I Lab
COURSE NUMBER	CHEM-0213
DIVISION	Math, Science, Business and Technology
DEPARTMENT	Chemistry
CIP CODE	24.0101
CREDIT HOURS	2
CONTACT HOURS/WEEK	Lab: 4
PREREQUISITES	College Chemistry II and Lab, CHEM-0112
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

This first semester laboratory deals with the fundamental techniques involved in organic laboratories, such as; distillation, crystallization, extraction, solubility, and various types of chromatography. Four laboratory hours per week are required. It is recommended that students enroll concurrently in Organic Chemistry CHEM-0211.

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. Separation, purification, and crystallization of benzoic acid and acetanilide
- II. Separation of neutral, acidic, and basic substances
- III. Extraction of compounds from plant material
- IV. Substitution and elimination reactions
- V. Qualitative analysis of alkanes and alkenes
- VI. Preparation and oxidation of an alkene

COURSE LEARNING OUTCOMES

Upon successful completion of this course, the student will:

- A. Be able to demonstrate a working knowledge of the proper use of standard laboratory equipment in organic chemistry (separatory funnels, heating mantles, condensers, ect.)
- B. Be able to preform, explain, and illustrate common laboratory techniques.
- C. Be able to follow procedures, carry out reactions, isolate, purify, and analyze the product.
- D. Be able to record, tabulate, and report scientific data and results in an organized fashion.

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>.