

# CHEM& 131L: INTRO TO ORGANIC/BIOCHEMISTRY

Presents organic chemistry and biochemistry, with emphasis on functional groups, synthesis, and biochemical applications. (NS)

## Course Student Learning Outcomes

1. Define organic chemistry in terms of the role of carbon in organic and biological chemistry.
2. Identify and classify major organic functional groups and recognize their presence in biological molecules.
3. Predict the physical properties and reactivities of organic compounds based on their structure.
4. Name and draw the structure of organic compounds, including isomers.
5. Define and recognize the different types of isomerism, including geometric, stereo, and constitutional.
6. Explain the importance of molecular shape in terms of function and properties.
7. Recognize structural differences between various types of biomolecules, such as lipids, carbohydrates, nucleic acids, and proteins, and identify their basic building blocks.
8. Explain how recrystallization, extraction, and chromatography are used for separation and purification of organic mixtures.

Credits: 6

Prerequisites: Eligibility for ENGL& 101; MATH 098/099 or higher; 2.0 or higher in high school chemistry or CHEM& 121; or permission of instructor.

Program: [Chemistry](#)