

BIO 310: Fundamentals of Molecular Structural Biology

Have you ever wondered how scientists determine the three-dimensional structure of nucleic acids and proteins? Or what can be gleaned about the function of a macromolecule from its structure? Focusing on nucleic acids and proteins, this course includes an introduction to structural bioinformatics, methods of macromolecular structure determination by diffraction and spectroscopic techniques, and the visualization and representation of biomolecules. Representative biomolecules provide the framework for the discussion of such concepts as motifs, domains, folds, conformation, molecular assembly, dynamics and recognition, as well as for addressing how specific biological questions are answered at the atomic level.

Units: 3

Prerequisites:

CHEM 150

Program: [Biology](#)