

CHEM 340: Biochemistry

We will learn, in detail, how the cell uses just a few types of raw materials to construct complex structures. Some have evolved to catalyze chemical reactions with a high degree of selectivity and specificity; we will uncover their enzymatic strategies. Living things harvest energy from their environment to fuel metabolic processes, reproduce, and grow; we will keep account of these transactions and consider the exquisite control that permits a cell to be responsive and adapt its responses to inputs from the environment. Key topics: protein structure and function, thermodynamics, enzyme mechanisms, transport, signaling, intermediary metabolism, and regulation. (Recommended prerequisite for medical school admissions.)

Units: 3 Prerequisites: CHEM 150 CHEM 301

Program: Chemistry