The Medical Chemistry Course has been designed to provide an introduction to the chemistry of biologically important organic and inorganic molecules as well as biomolecules in the first year medical students. Understanding the basic principles of chemistry is essential for medicine.

The topics provide knowledge of fundamentals of

* general chemistry (atomic/molecular electronic structure and bonding, thermodynamics-bioenergetics, kinetics, acid-base reactions, redox reactions, biologically important elements, etc)
* organic chemistry (alcohols, aldehydes, ketones, amines, ether, esters, carboxylic acids and other functional groups present in biological molecules such as amides, thiols, acyl phosphates, etc)
* structure and function of most important biomolecules in human body (carbohydrates, lipids, amino acids, proteins, glycoproteins, nucleic acids).
* Special emphasis is given to structure-function relationship