CHM 232 : Organic chemistry

Organic chemistry is the chemistry of compounds containing the element Carbon. Therefore, this course is essential to educate the students about organic nomenclature as a basic knowledge to understand the organic physical-chemical properties of drugs. The course provides the students with essential knowledge of atoms, molecules, bonds, function groups, and structure required to define alkanes, alkenes, alkynes, alcohols, ethers, carbonyl compounds, phenolic compounds, and aryl halides to understand their properties, structures and actions. The students will determine the chemical structure using Infra-Red (IR), Nuclear Magnetic Resonance (NMR) and Mass Spectroscopy (MS). The students will designate the mechanisms of organic reactions of substitution, addition, and elimination, and understand stereochemistry to detect chiral molecules and explain the difference in stereoisomers characters and reactions. It will cover in depth physical properties of drug compounds as a basic knowledge required for further subjects such as drug delivery system and pharmaceutical chemistry. Major organic chemical reactions covered in this course will help the student to understand subjects such as pharmacology and medicinal chemistry in the coming semesters.

Credits 4 Prerequisites PCHE 101/112 Corequisites None