

Course Overview



Course Information

Code: PCH-201

Title: Pharmaceutical Organic Chemistry

Cr hr: 3+1

Level: 3

Program: PharmD

Co-requisites: None

Prerequisites: CHEM-110

Course Description

The course provides the general introduction of organic chemistry, different functional groups, IUPAC nomenclatures and different classes of organic compounds covering their preparations, properties and reactions. The focus will be on the mechanism of reactions and stereochemical aspects of organic molecules. The chemistry and applications of heterocyclic compounds will be dealt in detail. The laboratory classes will involve the identification of different functionalities in organic compounds.

Topics

- Introduction to organic chemistry
- Structure of organic molecules
- Classification and nomenclature of organic compounds
- Organic reactions and their mechanisms
- Review of aliphatic compounds
- Aromatic compounds: benzene and its derivatives
- Aromatic aldehydes and ketones
- Aromatic carboxylic acids
- Derivatives of carboxylic acids
- Phenols
- Aromatic amines
- Polynuclear aromatic compounds
- Heterocyclic compounds
- Stereo-chemistry