

Course Overview



Course Information

Code: PCH-303

Title: Medicinal Chemistry I

Cr hr: 3+0

Level: 5

Program: PharmD

Co-requisites: None

Prerequisites: PCH-201

Course Description

The course provides an understanding of the fundamental principles of medicinal chemistry. The student will be introduced to primary drug targets, physicochemical properties in relation to biological action, drug metabolism, role of stereochemistry in drug action and drug transporters. It also covers the development of drugs acting on autonomic nervous system, non-steroidal anti-inflammatory drugs, opioid analgesics, antihistamines and antiulcer drugs with emphasis on structure activity relationship. The students will also be introduced to the biotechnology drugs.

Topics

- Introduction to medicinal chemistry
- Drugs and drug targets
- Physicochemical properties in relation to biological action
- Stereochemistry and drug action
- Drug metabolism
- Membrane drug transporters
- Adrenergic drugs
- Non-steroidal anti-inflammatory drugs
- Opioid analgesics
- Antihistaminic drugs
- Gastrointestinal drugs