Course Overview

KING KHALID UNIVERSITY
كلية الصيدلة
College of Pharmacy

Course Information

Code: PCH-304
Title: Medicinal Chemistry II
Cr hr: 3+1
Level: 6
Program: PharmD
Co-requisites: None
Prerequisites: PCH-303

Course Description

This course is designed to provide the knowledge to the students on physicochemical properties in relation to biological action, drug metabolism, role of stereochemistry in drug action and drug transporters. It covers the development of drugs acting on central nervous system, cardiovascular system, local anesthetics and diuretics with emphasis on structural features of drug molecules that are responsible for their activity (structure-activity relationships; SARs). The synthesis of some biologically important drugs will be introduced in this course. The purpose of practical section of this course is to expose the student to some synthetic and purification techniques in medicinal chemistry with some selected drugs.

Topics

- General anesthetics
- Sedatives and hypnotics
- Antianxiety agents
- Antipsychotics
- Anti-epileptics (anticonvulsants)
- Antiparkinsonian drugs
- CNS stimulants
- Antidepressants
- Drugs affecting serotonergic neurotransmission
- Local anesthetics
- Cardiovascular drugs:
- Anti-anginal drugs
- Anti-arrhythmic drugs
- Antihypertensive drugs
- Antihyperlipidimic drugs
- Antithrombotics
- Diuretics