

University of Baghdad

College of Pharmacy

Department of Pharmaceutical Chemistry

Title of the course: *Organic Pharmaceutical Chemistry II* Course number: **412**

Level: 4th Class, 1st Semester

Credit hours/week : **Theory 3 Laboratory 1**

Reference text: *Wilson and Gisvold Textbook of Organic Medicinal and Pharmaceutical Chemistry; Delgado JN, Remers WA, (Eds.); 10th ed., 2004.*

Objectives : The course is devoted to the discovery and development of new agents for treating diseases, and enables translating the drug structural formula into therapeutic effect. Additionally, it focuses on the methods of preparation for some pharmaceutical agents

No	Lecture title
1	Cholinergic agents, cholinergic receptors and their subtypes.
2	Cholinergic agonists; stereochemistry and structure-activity relationships (SAR); products; cholinesterase inhibitors.
3	Cholinergic blocking agent; structure-activity relationships (SAR); Solanaceous alkaloid and analogues; synthetic cholinergic blocking agents and products; ganglionic blocking agents (neuromuscular blocking agents).
4	Analgesic agents (SAR of morphine, SAR of meperidine type molecules; SAR of methadone type compounds; N-methylbezomorphans, antagonist type analgesics in benzomorphans).
5	Analgesic receptors, endogenous opioids; Products; Antitusive agents; Anti-inflammatory analgesics.
6	Adrenergic agents (Adrenergic neurotransmitters); Adrenergic receptors; Drugs affecting Adrenergic neurotransmission; Sympathomimetic agents; Adrenergic receptor antagonists.
7	CNS depressant; Benzodiazepines and related compounds; Barbiturates; CNS depressant with skeletal muscle relaxant properties; Antipsycotics; Anticonvulsants.
8	CNS Stimulants
9	Steroidal & nonsteroidal hormones

hours
3
5
5
5
5
5
8
7
3
4