

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Pharmaceutical Chemistry (1)
Course number	PHCH4210
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - 1.	Recognize the drugs affecting different targets or receptors.
2 - 2.	Identify the categories of certain classes of drugs and their effects.
3 - 3.	Apply the knowledge from prerequisite courses.
4 - 4.	Recognize the relation between molecules for design of certain synthetic leads.

Intended Learning Outcomes

Knowledge and Understanding	<ul style="list-style-type: none"> * This courses student learing outcomes fulfill the following programmatic goal of pharmaceutical chemistry. At the end of this course students will have a knowledge about the different drug groups * The students would have a knowledge about the IUPAC nomenclature of organic medicinal compounds and their biotransformation, synthesis, Strucrure activity relationship * The students would have an idea about the various physicochemical properties that can affect drug action as well as the various methods used in drug discovery and design
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Course Contents

- 1 - 1-Introduction
- 2 - Factors affecting drug activity
- 3 - Drug biotransformation
- 4 - Prodrugs
- 5 - Chemotherapeutic agents
- 6 - Disinfectants and Antiseptics
- 7 - Urinary tract antiseptics, quinolones
- 8 - Antibacterial Sulfonamides
- 9 - Antibiotics
- 10 - β -Lactam antibiotics (Penicillins, Cephalosporins, Monobactams ..)
- 11 - Carbapenems
- 12 - Carbapenems
- 13 - Tetracyclines
- 14 - Aminoglycosides
- 15 - Macrolides
- 16 - Polypeptides
- 17 - Antifungal agents

Teaching and Learning Methods

- 1 - , Special readings and searching in textbooks.Lectures,Discussion,

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
First midterm exam	seventh week	40
In Class Quizzes	during semester	10
Second midterm exam	Not present	-
Final exam	end of semester	50

Books and References

Essential books	Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical Chemistry, by J. Block and John Beale, 11th ed. Lippincott – Raven Publishers, Philadelphia. ISBN: 0781734819
Recommended books	<ol style="list-style-type: none">1. Foyes Principles of Medicinal Chemistry by Thomas L Lemke, David A Williams Lippincott Williams & Wilkins; 6th edition ISBN: 07817687992. Burgers Medicinal Chemistry and Drug Discovery, Drug Discovery and Drug Development Wiley-Interscience; 6th edition ISBN: 0471370282