

Module (Course Syllabus) Catalogue 2025-2026

College/ Institute	Medical Technical Institute				
Department	Dental Assistant Department				
Module Name	Pharmacology				
Module Code	PHA315				
Semester	3				
Credits	6				
Module type	Prerequisite	Core	*	Assist.	
Weekly hours					
Weekly hours (Theory)	(2)hr Class		(24)hr Workload		
Weekly hours (Practical)	()hr Class		()hr Workload		
Lecturer (Theory)	Dr. Adil Othman Abdullah				
E-Mail & Mob. No.	adil.abdullah@epu.edu.iq (07504604242)				
Lecturer (Practical)					
E-Mail & Mobile NO.					

<p>Course Description</p>	<p>Basic principles of pharmacology including receptor mechanisms, drug distribution and metabolism, and pharmacokinetics. Lectures, laboratories, and tutorials on the interactions of drugs and biological systems as a basis for rational disease therapy.</p> <p>LEARNING OBJECTIVES: By the end of this course, each student should be able to:</p> <ol style="list-style-type: none"> 1. Identify the fundamental principles of pharmacokinetics and pharmacodynamics. 2. Apply the pharmacodynamics and pharmacokinetic principles that describe drug actions in humans. 3. Compare and contrast the specific pharmacology of the major classes of drugs, important distinctions among members of each class, the risks and benefits, in relation to the organ systems they affect, and the diseases for which they are used therapeutically. 4. Identify the role of molecular genetics and genomic principles in pharmacotherapeutics and drug.
<p>Course objectives</p>	<p>Main objective: General knowledge related to Pharmacology</p> <p>Specific objective:</p> <ol style="list-style-type: none"> 1. Have a comprehensive knowledge of all the basic principles in Pharmacology. 2. Understand and classify drugs according to their group, mechanism of action and therapeutic uses. 3. Integrate their knowledge with data and information provided about certain species of drugs and adverse effects of those drugs. 4. Field of medicine that specializes in the study of drugs, their sources, appearance, chemistry, actions, and uses. 5. The requirements drugs as therapy, applying and selecting medication to specific disease. 6. Rationale usage of medicinal drugs as their group family of drugs, their doses and dosage forms, drug-drug interactions, and drug-food interactions. 7. Identification of action and potential harmful effects of medications and chemical compounds to humans and animals, and to provide for their prevention and treatments. 8. Pharmacodynamics – Study of how drugs interact in the human body.
<p>Student's obligation</p>	<p>Theoretical Exams</p> <p>Theoretical exams use:</p>

	<ul style="list-style-type: none"> • written tests : open end, multiple choice, true and false questions and problem-situation questions • quizzes –short, unannounced tests <p>The duration and number of questions of the tests depend on the type of the test (quiz, mid-semester, and final) and complexity of the topic under evaluation.</p> <p>clinical Exams</p> <p>Clinical exams are carried out by continuous evaluation and assessment of students' during the course. Performing duties and assignment and performance of students during the course in presentation and active discussion and participation in the activities will be observe and evaluated by teachers and clinical instructors.</p> <p>Advice on answering technique</p> <p>In order to pass the exams successfully students are given the following advice:</p> <ul style="list-style-type: none"> • To read the questions twice • Think carefully before answering • Plan the answers on a separate sheet of paper
Required Learning Materials	<p>Materials for the laboratory will be provided by the university</p> <p>Note books for lectures and laboratory reports.</p> <p>Laboratory coats must be worn during laboratory exercises.</p> <p>A hall with data-show device</p> <p>Handouts</p>
Assessment scheme	<p>24% Mid Term (Theory and practical)</p> <p>8% Quiz</p> <p>2% Class Activity</p> <p>% Assignment (report, paper, homework, seminar...)</p> <p>40% final theory</p>
Specific learning outcome:	<p>Upon completion of the course, students should be able to:</p> <ol style="list-style-type: none"> 1. Make student to be able to identify all type of drug. 2. Understanding development and basic principles of pharmacology. 3. Understand mechanism of action and effect of drug on human body. 4. Understand and all information about toxic dose effect of drug on human body. 5. Provide information to students about the manufacture drug company in our country and other country. 6. Make students to know which type of drug are benefit in some kind of disease like kidney and liver disease. 7. Aim purpose of this lecture on pharmacology to be able student become good acquired information. 8. Stimulate student prepare scientific report to collection information about drug medication for all type of disease.
Course References:	<ol style="list-style-type: none"> 1. Magazines and review (internet) www.wikipedia.com \\pharmacology. 2. -Goodman, Gilman's the pharmacological basic of therapeutics 11th edition. 3. -Lippincott illustrated pharmacology 2nd edition

Course topics (Theory)	Week	Learning Outcome
Introduction – pharmacodynamics ,receptor, drug receptor interaction	1	
Pharmacokinetic ; Absorption, Distribution , Metabolism , Excretion	2	
Diuretic drugs	3	
Antihypertensive agents	4	

Drug used for asthma	5	
----------------------	---	--

Ant diabetic drugs ,Insulin therapy ,Oral hypoglycemic agents	6	
Antibiotic	7	
Antiparasit agents ,Anti-fungal ,Antivirus	8	
Non steroid anti inflammatory agents	9	

Antianxiety , Antidepressant agents	10	
Drugs use for cough	11	
Drugs use treat diarrhea ,Drugs use for treat constipation	12	
Heparin , Antiplatelet , Thrombolytic agents Progesterone and anti- progesterone , Estrogen and antiestrogen	13	

Ant motility drugs , Anti emetic agents	14	
---	----	--

Examinations:

Q1/ Define all of the following?

Q2/ Filling the following sentence?

Q3/ Explain ? (Only 2) Q4/

Enumerate ?

Q5/ Chose the correct answer?

The exams will be held during the course.

- Quizzes – during theoretical hours.

- Theoretical exams: midterm and final exam (Multiple choices questions, Single choices Questions, Short Essays, T and F statement selection

- Enumerate the ?

- 2- true or false type of exams:

- In this type of exam a short sentence about the specific subject will be provided, and then students will select the true or false of these particular sentences.

- e.g : acetaminophen is anti-inflammatory drug? - answer: false

- 3- multiple choice:

- In this type of exam there will be number of phrases next or bellow a statement, students
- will match the correct phrase.

External Evaluator:

Promote critical thinking of crucial course concepts. Identify and help students overcome the course.

Lectures covered all aspects and fundamentals of dental pharmacology in dental assistant perspective.



Dr. Hiwa Saeed Khdir PhD