



**Jordan University of Science and Technology**  
**Faculty of Applied Medical Sciences**  
**Physical Therapy Department**

P.T313 Pharmacology

First Semester 2022-2023

**Course Catalog**

2 Credit Hours. This course will present the primary drug classes and the physiologic basis of their action. Drugs will be grouped according to their general effects and the type of disorders they are routinely used to treat. Special emphasis will be placed on drugs that are commonly used to treat people receiving physical therapy. This course will likewise address how drug therapy interacts with physical therapy, and how drugs can exert beneficial effects as well as adverse side effects that impact on rehabilitation.

**Teaching Method:** Blended

**Text Book**

<b>Title</b>	Main Reference (Required Textbook) Pharmacology in Rehabilitation, Updated 5th Edition.
<b>Author(s)</b>	Charles D. Ciccone
<b>Edition</b>	5th Edition
<b>Short Name</b>	Ref 1
<b>Other Information</b>	2022

**Instructor**

<b>Name</b>	<b>Dr. Ali BaniAhmed</b>
<b>Office Location</b>	-
<b>Office Hours</b>	
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**Class Schedule & Room**

Section 1:  
Lecture Time: Wed : 13:00 - 14:00  
Room: M3303

Prerequisites		
Line Number	Course Name	Prerequisite Type
102121	MED212 Pathology	Pre./Con.

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Basic Principles of pharmacology: Drug nomenclature, FDA regulation, drug administration, distribution, and excretion	From <b>Ref 1</b>
Weeks 2, 3	Treatment of pain and inflammation: analgesics and anti-inflammatory drugs (opioids, NSAIDs, acetaminophen, glucocorticoids)	From <b>Ref 1</b>
Week 4	Skeletal muscle relaxants: Treatment of muscle spasms and spasticity	From <b>Ref 1</b>
Week 5	Anesthesia: general anesthetics (barbiturates, inhaled anesthetics , etc) , local anesthetics (lidocaine , etc )	From <b>Ref 1</b>
Week 6	Respiratory drugs Antitussives, antihistamines, decongestants, treatment of asthma)	From <b>Ref 1</b>
Week 7	Hypertension and Cardiovascular drugs	From <b>Ref 1</b>
Week 8	Diabetes Miletus pharmacology	From <b>Ref 1</b>
Week 9	Parkinson?s disease pharmacology	From <b>Ref 1</b>
Week 10	Oncology harmacology	From <b>Ref 1</b>
Week 11	Stroke pharmacology	From <b>Ref 1</b>
Week 12	Geriatric poly-pharmacology	From <b>Ref 1</b>
Week 13	Fall Risk and Medications - Exercise as a Drug PART 1	From <b>Ref 1</b>
Week 14	Fall Risk and Medications - Exercise as a Drug PART 2	From <b>Ref 1</b>

Mapping of Course Outcomes to Program Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Understands the pharmacokinetic principles with pharmacodynamics including the physiological mechanisms by which individual drugs affect different organ systems in the body and judge how drug effects are influenced by their administration, absorption, distribution, storage, and metabolism in the body. [1PLO1 -K1]	20%	
Understands general categories of drugs that are therapeutically utilized for specific disease and dysfunction within the body. [1PLO1 -K1]	15%	

Evaluate drug side effects and differentiate these side effects from the symptoms of the patient's disease(s) [1PLO7-S3]	10%	
Assess the rehabilitation concerns in situations where drug levels are too high versus too low (ie, increased drug toxicity versus decreased efficacy). [1PLO6-S2]	10%	
Select appropriate physical therapy interventions in accordance with the client's drug regimen and judge the potential for harmful interactions between specific drugs and various physical therapy interventions. [1PLO7-S3]	15%	
Integrate an understanding of a patient's or client's prescription and nonprescription medication regimen with consideration of its impact on health, function, movement, and disability. [1PLO10-C3]	30%	

Relationship to Program Student Outcomes (Out of 100%)									
PLO1 - K1	PLO2- K2	PLO3- K3	PLO4-K4	PLO5-S1	PLO6-S2	PLO7-S3	PLO8-C1	PLO9-C2	PLO10-C3
35					10	25			30

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