

Course Description Form

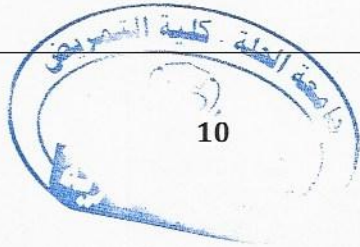
1. Course Name:	
Pharmacology for nursing II	
2. Course Code:	
PHR210	
3. Semester: second stage / second semester	
2024\2025	
4. Description Preparation Date:	
30\1\2025	
5. Available Attendance Forms:	
Attendance	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Theory: 30 hours, 2 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Maysam Ali Ameen Awadh Email : maysamawadh2@gmail.com	
8. Course Objectives	
Course Objectives	First: Cognitive Objectives By the end of this course, the nursing student will be able to: 1. Understanding the basic principles of pharmacology, including pharmacokinetics and pharmacodynamics. 2. Identifying the main drug categories used in the treatment of common diseases and their role in nursing care. 3. Understanding the effect of drugs on different body systems and how the patient's physiological condition affects the drug's efficacy. 4. Distinguishing adverse drug reactions (ADRs) and drug interactions with other medications or food.



	<ol style="list-style-type: none"> 5. Analysis of individual factors that affect patients' responses to medications, such as age, gender, chronic diseases, and genetic differences. 6. Familiarizing oneself with the laws and regulations regarding medication management in various healthcare settings. 7. Recognizing the signs and symptoms of an overdose or drug poisoning and taking appropriate nursing actions. <p>Secondly: Skill-based Objectives By the end of this course, the nursing student will be able to:</p> <ol style="list-style-type: none"> 1. Applying the principles of medication safety in administering drugs according to the approved nursing protocols. 2. Administering medications safely through various routes (oral, intravenous, intramuscular, subcutaneous, etc.) according to proper nursing procedures. 3. Calculating medication doses accurately using appropriate pharmaceutical calculations according to the patient's condition. 4. Monitoring patients' responses to medications and reporting any unexpected side effects or complications. 5. Providing health education to patients about the use of medications, including correct dosages, side effects, and potential interactions. 6. Implementing medication documentation procedures accurately, including recording administered medications, potential interactions, and the patient's response to treatment. 7. Dealing with pharmaceutical emergencies such as anaphylaxis and drug poisoning, using first aid and appropriate nursing procedures. 8. Using drug information systems such as electronic medical records (EMR) and modern applications to update drug information.
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9. Teaching and Learning Strategies

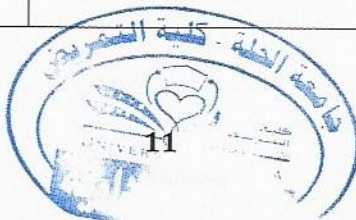
Strategy	<p>Lectures: To present basic information and theoretical concepts.</p> <p>Group discussions: To enhance critical thinking and effective participation among students.</p> <p>Teamwork: To develop collaboration skills and the practical application of concepts.</p> <p>Evaluation methods: Written tests: to measure the theoretical understanding of concepts and terms. Practical assessment (applied skills): through case studies or the execution of practical activities. Participation in group discussions: to assess the level of interaction and critical understanding. Brainstorming</p>
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10. Course Structure

No.	Hours	Required Learr	Unit or subject name	Learning method	Evaluation
		Outcomes			method
First week	2 hours	Presentation of a series of discrete slides using the whiteboard	Drug therapy across the life span: <ul style="list-style-type: none"> • Drug therapy during pregnancy and breast feeding. • Drug therapy for pediatric patients. • Drug therapy for Geriatric patients 	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
Second week	2 hours	Presentation of a series of discrete slides using the whiteboard	Administration of Medications: <ul style="list-style-type: none"> • Preventing medication errors. • Medication systems. • Medication orders. 	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
Third week	2 hours	Presentation of a series of discrete slides using the whiteboard	<ul style="list-style-type: none"> • Drug preparations and dosage forms. • Routes of drug administration. 	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
Fourth week	2 hours	Presentation of a series of discrete slides using the whiteboard	Drugs used in the treatment of Dyslipidemia: <ul style="list-style-type: none"> • Role of LDL-cholesterol in atherosclerosis. • Lipid lowering drugs. 	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
Fifth weeks	2 hours	Presentation of a series of discrete slides using the whiteboard	Anti-coagulant, anti-platelet and Thrombolytic Drugs: <ul style="list-style-type: none"> • Overview of drugs used to treat thrombi-embolic disorders. 	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz



Sixth week	2 hours	Presentation of a series of discrete slides using the whiteboard	<ul style="list-style-type: none"> • Parenteral anti-coagulants, Oral anti-coagulants, anti-platelet drugs. • Thrombolytic drugs. 	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
seventh week	2 hours	Presentation of a series of discrete slides using the whiteboard	Drugs used for Deficiency Anemia <ul style="list-style-type: none"> • deficiency. • Vitamin B12 deficiency. • Folic acid deficiency. 	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
Ninth week	2 hours	Presentation of a series of discrete slides using the whiteboard	Antibiotics introduction Antibiotic classification	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
Tenth week	2 hours	Presentation of a series of discrete slides using the whiteboard	Antibiotics first group second group	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
Eleventh weeks	2 hours	Presentation of a series of discrete slides using the whiteboard	Antibiotics first group second group	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
Twelfth week	2 hours	Presentation of a series of discrete slides using the whiteboard	Respiratory system - diseases affecting the respiratory system receptors present medicines that act on the respiratory system, mechanism of action	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz
thirteenth week	2 hours	Presentation of a series of discrete slides using the whiteboard	Anesthesia medications Hypnotic medications Epilepsy medications	Lectures, group discussion, seminars, clinical training, brain storming, and assignments.	Quiz



Fourteenth Week	2 hours	Presentation of a series of discrete slides using the whiteboard	Anesthesia medications Hypnotic medications Epilepsy medications	Lectures, group discussion, seminars, clinical training, brain storming, and assignments	Quiz
Fifteenth Week	2 hours	Presentation of a series of discrete slides using the whiteboard	Administration of Medications: <ul style="list-style-type: none"> • Preventing medication errors. • Medication systems. • Medication orders. • Drug preparations and dosage forms. • Routes of drug administration. 	Lectures, group discussion, seminars, clinical training, brain storming, and assignments	Quiz



11. Course Evaluation	
The grade of the semester (100) is distributed as follows	
The presence score	5%
Daily Test Score	5%
Mid exam score	20%
Final exam score	70%
12 Learning and Teaching Resources	
Required textbooks (methodology, if any)	
Key references (sources)	<p>Brunton, L. L., Knollmann, B. C., & Hilal-Dandan, R. (2022). <i>Goodman & Gilman's: The pharmacological basis of therapeutics</i> (14th ed.). McGraw-Hill Education.</p> <p>Katzung, B. G., Vanderah, T. W., & Trevor, A. J. (2021). <i>Basic and clinical pharmacology</i> (15th ed.). McGraw-Hill Education.</p> <ul style="list-style-type: none"> • Scientific Journals: <ol style="list-style-type: none"> 1. <i>British Journal of Pharmacology</i> – Published by Wiley. 2. <i>Journal of Pharmacology and Experimental Therapeutics</i> – Published by ASPET. 3. <i>Clinical Pharmacology & Therapeutics</i> – Published by Wiley. 4. <i>European Journal of Pharmacology</i> – Published by Elsevier. 5. <i>The Lancet – Pharmacology Section</i> – Published by Elsevier.
Recommended books and references (scientific journals, reports...)	<p>Rang, H. P., Dale, M. M., Ritter, J. M., Flower, R. J., & Henderson, G. (2019). <i>Rang & Dale's pharmacology</i> (9th ed.). Elsevier.</p> <p>Brenner, G. M., & Stevens, C. W. (2018). <i>Pharmacology</i> (6th ed.). Elsevier.</p>
Electronic references, websites	<ol style="list-style-type: none"> 1. PubMed - Medical and Pharmaceutical Research Database. www.pubmed.ncbi.nlm.nih.gov 2. National Center for Biotechnology Information (NCBI) - www.ncbi.nlm.nih.gov



	<ol style="list-style-type: none"> 3. World Health Organization (WHO) – Essential Medicines List - www.who.int 4. U.S. Food and Drug Administration (FDA) - www.fda.gov 5. Medscape Pharmacology - www.medscape.com 6. Drugs.com - Reliable pharmaceutical encyclopedia. www.drugs.com 7. American Society for Pharmacology and Experimental Therapeutics (ASPET) -
Course Development Plan	<ul style="list-style-type: none"> · Updating scientific content: Review and update new medications and add advanced pharmacological concepts. Reliance on modern clinical practice guidelines (Clinical Guidelines). · Introducing interactive educational tools: Designing interactive activities, such as instant online quizzes and pharmaceutical simulation games. Using virtual reality (VR) to simulate the effect of drugs inside the body. Improving evaluation and performance measurement: Creating tests based on clinical cases instead of just theoretical questions. Application of the Objective Structured Clinical Examination (OSCE). · Practical and applied training: Providing opportunities for field training in hospitals and clinical pharmacies. Presenting mini research projects for students on new drugs or recent drug effects.

