

Spring Semester

Academic Year 2023 – 2024

2nd semester 1st graders

A COURSE MODULE DESCRIPTOR FORM

Module Information			
Course Module Title	Pharmacology		
ناوی کۆرس مۆدیول	دهرمانناسی		
عنوان الوحدة	علم الأدوية للتمريض		
Course Module Type	Core	Module Code	PH201
ECTSs	6		
Department	Pharmacy		
Department Code	PH		
Module Website (CMW)	List of Modules (noble.edu.krd) / Noble Insitute – Noble Institute		
Module Leader (ML)	Narmin Mahmoud		
NTI - E - mail	Narmin.Ismail@noble.edu.krd		
ML Acad. Title	Assistant Lecture		
ML ORCID	https://orcid.org/0000-0003-3174-1066		
ML Google Scholar Acc	Narmin.kurdneth@gmail.com		

Relation with Other Modules	
Pre-requisites	None
Module Aims, Learning Outcomes and Indicative Contents	
Module Introductory Description	<p>Pharmacology is the study of drugs and their origin, nature, properties, and effects on the human body. For this reason, the study of pharmacology is important for all pursuing a healthcare-related field, especially for pharmacy assistant. Pharmacology helps technicians to be well rounded and provides a source of practical knowledge for daily work in the healthcare setting. Technicians who compound preparations and assist in filling prescriptions can use knowledge of the properties of the medications they are handling to ensure accuracy and patient safety.</p> <p>These courses include teaching the student group of drugs, emphasis on mode of action of drugs, and use chemicals that impacts on human body with their metabolism and potential harmful effects.</p>
Module Aims	Pharmacology helps students to be well rounded and provides a source of practical knowledge for daily work in the healthcare setting
Module Learning Outcome	<p>Upon successful completion of this course, students will be able to:</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. Field of medicine that specializes in the study of drugs, their sources, appearance, chemistry, actions, and uses. 4. The requirements drugs as therapy, applying and selecting medication to specific disease. 5. Rationale usage of medicinal drugs as their group family of drugs, their doses

Spring Semester

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	<p>and dosage forms, drug-drug interactions, and drug-food interactions.</p> <p>6. Identification of action and potential harmful effects of medications and chemical compounds to humans, and to provide for their prevention and treatments.</p> <p>7. Pharmacodynamics – Study of how drugs interact in the human body</p>
Learning and Teaching Strategies	
Strategies	<p>The teaching consists of Lectures, discussion groups, tutorials, problem solving and seminars. The instructions are partially or completely in English. Emphasis is placed on the student's ability to collect and process material as well as the student's ability to write and make oral presentation on the efficacy and safety of pharmaceutical drugs.</p>

Required texts and References	
<ol style="list-style-type: none"> 1. <i>Drug delivery systems: An updated review</i> 2. Gaurav Tiwari, Ruchi Tiwari, Birendra Sriwastawa,¹ L Bhati,² S Pandey, P Pandey, and Saurabh K Bannerjee³ 3. Author information Copyright and License information Disclaimer 4. <i>Moghimi SM, Hunter AC, Murray JC. Long-circulating and target-specific nanoparticles: Theory to practice. Pharmacol Rev. 2001;53:283–318. [PubMed] [Google Scholar]</i> 5. <i>Moini, J. (2015). The Pharmacy Technician, A Comprehensive Approach, 3rd Edition. Boston, MA: Cengage Learning.</i> 	



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Spring Semester

Academic Year 2023 – 2024

2nd semester 1st graders

6. *Moscou, K & Snipe, K. (2019). Pharmacology for Pharmacy Technicians, 3rd Edition. St. Louis: MO:Elsevier Mosby.*
7. *Moscou, K & Snipe, K. (2019). Workbook - Pharmacology for Pharmacy Technicians, 3rd Edition.St. Louis: MO: Elsevier Mosby*

Module Delivery	
Total workload	
Contact Theoretical Hours – Per semester	2 hours
Contact Practical Hours – Per Semester	NA

Spring Semester

Academic Year 2023 – 2024

2nd semester 1st graders

Module Assessment			
Module Activities	Time /Number	Weight (Marks)	Week Due
- Contact hours – Participation	- Daily bases	- 10%	- Weekly
- Case study	- 1 per group	- 5%	- Week 5-9
- Seminar	- 1 per group	- 5%	- Week 7
- Tutorial	- 1 per group	- 5%	- Within 15,16 weeks
- Self-study	- 1 per group	- 5%	- Within 18 weeks
- Quiz	- 1 per group	- 5%	- Week 3-6
- Oral assessment	- Individually	- 5%	- Week 4-9
- Midterm Exam	- paper exam	- 20%	- Week 8
- Final Exam	Paper centralized exam	- 40%	- Week 18
- Total	-	- 100%	- In total of 14 weeks

Spring Semester

Academic Year 2023 – 2024

2nd semester 1st graders

	Course Module Content/ theory
Week 1	1. Introduction to Principles of Pharmacology 2. Define basic pharmacological terminology.
Week 2	3. Pharmacokinetic and pharmacodynamics
Week 3	4. Continue with Pharmacokinetic and pharmacodynamics (ADME) / Pharmacodynamics – Study of how drugs interact in the human body
Week 4	3- Drug delivery system –rout of administration /Compare the routes of drug administration and dosage (bioavailability)-advantage and disadvantages
Week 5	5. Continue with week 3
Week 6	6. Understand and classify drugs according to their group, mechanism of action and therapeutic uses. 7. Drug classification per system
Week 7	seminar
Week 8	Midterm exam
Week 9	8. The requirements drugs as therapy, applying and selecting medication to specific disease. (hyper-hypo tension)
Week 10	9. Demonstrate an understanding of some experimental approaches in pharmacological science.
Week 11	10. Identify and explain common mechanisms of drug interactions
Week 12	11. Continue with week 9
Week 13	12. Vaccine
Week 14	13. Continue with week 13
Week 15	14. Overall course evaluation



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Spring Semester

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Week 16	Tutorial class (important)
Week 17	Quick revision - overall
Week 18	Final exam session

	Course Module Content/ practical
Week 1	No practical
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	



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Spring Semester

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Week 15	
Course Keywords	
Drug delivery, drug classification, drug actions ,drug safety	