



Syllabus*: Pharmacology 3

(131702363)

First Semester 2021 /2022

COURSE INFORMATION

<p>Course Name: Pharmacology 3 (<u>face to face education</u>)</p> <p>Semester: First Semester</p> <p>Department: Department of clinical pharmacy and pharmacy practice</p> <p>Faculty: Pharmaceutical Sciences</p>	<p>Course Code: 131702363</p> <p>Section: 1, 2, 3</p> <p>Core Curriculum: 2013 - Pharmaceutical Sciences program study Plan.</p>
<p>Day(s) and Time(s): Section 1: Sunday, Tuesday (8.00-9.00), Classroom: 208 Section 2: Sunday, Tuesday (9.00-10.00), Classroom: 207 Section 3: Monday, Wednesday (1.00-2.00), Classroom: 115</p>	<p>Credit Hours: 2</p> <p>Prerequisites: Pharmacology 2 (131702362)</p>

COURSE DESCRIPTION

Pharmacology is the study of drugs. Pharmacology III course deals with the action, mechanism of action, biotransformation, side effects, clinical uses and contraindications of: antimicrobial agents, antineoplastic therapy, as well as immunopharmacology. The course provides students the comprehensive knowledge about drug classes covered in this course and focuses on recognized pharmacotherapy approaches encountered patient's care practice.

DELIVERY METHODS

The course will be delivered through a combination of active learning strategies. These will include:

- PowerPoint lectures and active classroom-based discussion including case -solving problems.
- Relevant films and documentaries
- Video lectures

FACULTY INFORMATION

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REFERENCES AND LEARNING RESOURCES

Title: Basic & clinical pharmacology / Basic and clinical pharmacology,
 Author: Katzung, Bertram G. Masters, Susan B. Trevor, Anthony J.
 Edition: 14th edition, 2018
 ISBN 978-1-259-64115-2
 ISSN 0891-2033

Title: Pharmacology (Lippincott Illustrated Reviews Series)
 Author: Richard A. Harvey, Michelle A Clark, Richard Finkel, Jose A. Rey, Karen Whalen
 Edition: 7th edition, 2019

Course Objectives

After completion of this course the student will:

1. Identify most commonly used drugs in the major drug categories covered in this course.
2. Develop basic knowledge about drug uses, mechanism of action, characteristics, side effects, interactions, kinetics and contraindications.
3. Develop knowledge of key clinical notes about major drugs and how to administer them.
4. The student will be able to translate pharmacological knowledge from this course into clinical decision-making.
5. Be able to retrieve relevant information about the drug from trusted online and offline resources.

Intended Learning Outcomes

A. Knowledge and Understanding

- A.1- Know the basic pharmacology of different classes of antimicrobials, anticancers as well as immunopharmacology, gastrointestinal pharmacology and dermatologic pharmacology.
 A.2- Distinguish the prototype drugs that work on one or more of the human body's systems.
 A.3- Know the main sources that can be used to get information about pharmacology.
 A.4- Know his/her role as a pharmacist as one of health care providers and how he/she could improve patient knowledge about drugs.

B. Essential for Practice and Care (Intellectual Skills):

- B.1- Effectively relates some symptoms to a possible side effect of certain drugs.
 B.2- Get the basic knowledge of how drug effect is related to binding to different types and subtypes of receptors and how knowing the receptor of a certain drug would help in designing it and predicting its effect.

C. Approach to Practice Pharmacy:

- C.1- Students will be able to recognize the uses for the drugs that are covered in this course.

C.2- Students will be able to recognize some of the drug/drug interactions between the drugs that will be covered in this course.

C3- Students will be able to expect some of the predictable side effects of antimicrobials, anticancer as well as immunosuppressants and drugs used for dermatologic conditions.

D. Personal and Professional Development:

D.1- Students will be able to effectively communicate with others about the effectiveness and safety of antimicrobials, anticancer as well as immunosuppressants and drugs used for dermatologic conditions.

D2- Students will be able to optimize patient therapy based on patient condition.

D3- - Students will be able to identify medications-related problems and what is the appropriate actions to solve these problems.

STUDENT LEARNING OUTCOMES MATRIX

An alignment matrix of the **program** ILOs of the Bachelor of Pharmacy at The Hashemite University, the **course** ILOs and knowledge, skills and competencies as mentioned in the Jordan National Qualifications Framework (JNQF)

Field according to (JNQF)	Required to achieve (according to (JNQF))	Core curriculum learning outcomes	B.Sc. Pharmacy Program ILOs	Course Objectives	Course Student ILOs					Assessment Method
					A	B	C	D		
Knowledge	A systematic understanding of the theories, concepts, principles and circulations related to the field of learning, some of which are within the limits of the latest scientific findings	Foundational Knowledge	Learner	1-5	A.1- A.4					First, Second and final exam
Skills	Mastering the skills and tools required to solve complex problems in a specialized field of study	Essentials for Practice and Care	Caregiver	2-5		B.1				
	Demonstrate specialized and conceptual skills in the field of study		Manager							
	Practice evaluation in planning, design, technical and/or supervisory functions related to products, services or processes	Approach to Practice and Care	Promoter							
			Provider							
			Creative Thinker & Problem-Solver	2-5	B.2	C.1- C.3	D.1			
			Educator	2-5			D.1			
			Advocate	2-5		D.1 D.2				
Collaborator			D.2							
Includer			D.1							
Communicator	2-4									
Competencies	Management of activities and projects	Personal & Professional Development	Self-aware							
	Take responsibility for decision-making in work or study contexts		Leader				D.2 D.3			
			Innovator							

	Take responsibility for group work and work effectively with peer guidance	Pharmaceutical Product Expert	Professional	2-4			C.1-C.3	D.1			
	Transfer and apply diagnostic and creative skills in a range of contexts		Manufacturer								

ACADEMIC SUPPORT

It is The Hashemite University policy to provide educational opportunities that ensure fair, appropriate and reasonable accommodation to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to contact their instructor to ensure that their individual needs are met. The University through its Special Need section will exert all efforts to accommodate for individual's needs.

Special Needs Section:

Tel: +962-5390333-4209

Location: Students Affairs Deanship/ Department of student Welfare Services

Email: amalomoush@hu.edu.jo

amalomoush@staff.hu.edu.jo

COURSE REGULATIONS

Participation

Class participation and attendance are important elements of every student's learning experience at The Hashemite University, and the student is expected to attend all classes. A student should not miss more than 15% of the classes during a semester. *Those exceeding this limit of 15% will receive a failing grade regardless of their performance.* It is a student's responsibility to monitor the frequency of their own absences. **Attendance record begins on the first day of class irrespective of the period allotted to drop/add and late registration. It is a student's responsibility to sign-in; failure to do so will result in a non-attendance being recorded.**

In exceptional cases, the student, with the instructor's prior permission, could be exempted from attending a class provided that the number of such occasions does not exceed the limit allowed by the University. The instructor will determine the acceptability of an absence for being absent. A student who misses more than 25% of classes and has a valid excuse for being absent will be allowed to withdraw from the course.

At the beginning of the lectures, students should be on time and don't leave before the end of the lecture without an accepted excuse. **If any one missed a class, it is his/her responsibility to find out about any announcements or assignments you have missed..**

Sharing of course materials is forbidden. No course material including, but not limited to, course outline, lecture hand-outs, videos, exams, and assignments may be shared online or with anyone outside the class. Any suspected unauthorized sharing of materials, will be reported to the university's Legal Affairs Office. If a student violates this restriction, it could lead to student misconduct procedures.

Plagiarism

Plagiarism is considered a serious academic offence and can result in your work losing marks or being failed. HU expects its students to adopt and abide by the highest standards of conduct in their interaction with their professors, peers, and the wider University community. As such, a student is expected not to engage in behaviours that compromise his/her own integrity as well as that of the Hashemite University.

Plagiarism includes the following examples and it applies to all student assignments or submitted work:

- Use of the work, ideas, images or words of someone else without his/her permission or reference to them.
- Use of someone else's wording, name, phrase, sentence, paragraph or essay without using quotation marks.
- Misrepresentation of the sources that were used.

The instructor has the right to fail the coursework or deduct marks where plagiarism is detected

Cheating

Cheating, academic misconduct, fabrication and plagiarism will not be tolerated, and the university policy will be applied. Cheating policy: The participation, the commitment of cheating will lead to applying all following penalties together:

- Failing the subject, he/she cheated at
- Failing the other subjects taken in the same course
- Not allowed to register for the next semester
- The summer semester is not considered as a semester

Student Complaints Policy

Students at The Hashemite University have the right to pursue complaints related to faculty, staff, and other students. The nature of the complaints may be either academic or non-academic. For more information about the policy and processes related to this policy, you may refer to the students' handbook.

COURSE ASSESSMENT

Course Calendar and Assessment

Students will be graded through the following means of assessment and their final grade will be calculated from the forms of assessment as listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

Assessment	Grade Weighting	Deadline Assessment
First Exam	30%	Week (6- 7) 7 th -18 th Nov 2021
Second Exam	30%	Week (11-12) 5 th -16 th Dec 2021

Description of Exams

Test questions will predominately come from material presented in the lectures. Semester exams will be conducted during the regularly scheduled lecture period. Exam will consist of multiple choice based on descriptive questions, explanation questions, and case-solving problem questions.

In cases where a student misses an assessment on account of a medical reason or with prior permission; in line with university regulations an incomplete grade for the specific assessment will be awarded and an alternative assessment or extension can be arranged.

Grades are not negotiable and are awarded according to the following criteria*:

Letter Grade	Description	Grade Points
A+	Excellent	4.00
A		3.75
A-		3.50
B+	Very Good	3.25
B		3.00
B-		2.75
C+	Good	2.50
C		2.25
C-		2.00
D+	Pass	1.75
D	Pass	1.50
F	Fail	0.00
I	Incomplete	-

WEEKLY LECTURE SCHEDULE AND CONTENT DISTRIBUTION

For pharmacology 3 course, sections with 2 lecture periods per week. One lecture period covers 1 lecture hour (50 minutes). The course contents are described as main topic and detailed related subtopics.

<u>1. Treatment of GI Diseases</u>	<u>Week 1-2/3</u>	<u>5 lecture hours</u>
1.1 Dugs used in acid -Peptic disease. 1.2 Drugs Used to Control nausea and vomiting 1.3 Drugs used to treat constipation 1.4 Drugs used to treat diarrhea		
<u>2. Antimicrobials</u>	<u>Week 3/4-8/9</u>	<u>12 lecture hours</u>
2.1 Introduction to antimicrobials 2.2 Antibacterial agents 2.2.1 Beta-Lactam & Other Drugs Used in the Cell Wall- & Membrane Active Antibiotics 2.2.2 Tetracyclines, Macrolides, Clindamycin, Chloramphenicol, Streptogramins. 2.2.3 Aminoglycosides & Oxazolidinones 2.2.4 Sulfonamides, Trimethoprim, & Quinolones 2.3 Antifungals 2.4 Antivirals 2.5 Antiprotozoal agents		
<u>3. Cancer Chemotherapy</u>	<u>Week 9/10-13</u>	<u>9 lecture hours</u>
<u>4. Immunopharmacology</u>	<u>Week 13/14-15</u>	<u>5 lecture hours</u>
University Exams	<u>Week 15-16</u>	