The Hashemite University

الجامعـــــــة الهاشميـــــــــة

Faculty of Pharmaceutical Sciences

كلية العلوم الصيدلانية

Syllabus: Pharmacology (2) (#131702362)
Second Semester 2023 /2024

COURSE INFORMATION	
Course Name: Pharmacology (2) (face-to-face education) **Semester:** First **Department:** Clinical Pharmacy & Pharmacy Practice **Faculty:** Pharmaceutical Sciences	**Course Code:** 131702362 **Section:** According to the semester **Core Curriculum**: 2019 Study Plan
Day(s) and Time(s): According to the semester **Classroom:** According to the semester	**Credit Hours:** 3 **Prerequisites**: 131702361 (Pharmacology 1)

COURSE DESCRIPTION

Pharmacology is the study of drugs. Pharmacology II course deals with the action, mechanism of action, biotransformation, side effects, clinical uses and contraindications of: drugs act on the CNS, autocoids, nonsteroidal anti-inflammatory drugs, disease modifying antirheumatoid drugs, drugs used in gout as well as endocrine drugs.

DELIVERY METHODS

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

- PowerPoint lectures and active classroom-based discussion
- Relevant films and documentaries
- Video lectures

FACULTY INFORMATION

Name	**Dr Heba Khader**
Academic Title:	**Assistant Professor**
Office Location:	**Third Floor**
Telephone Number:	**Extension: 3443**
Email Address:	**hebaa@hu.edu.jo**
Office Hours:	**According to the semester**

Name	**Dr Abdelrahim Alqudah**
Academic Title:	**Assistant Professor**
Office Location:	**Third Floor**
Telephone Number:	**Extension: 3437**
Email Address:	**Abdelrahim@hu.edu.jo**
Office Hours:	**According to the semester**

REFERENCES AND LEARNING RESOURCES

Required Textbook(s):

1. Katzung, Bertram G. Masters, Susan B. Trevor, Anthony J. ***Basic and clinical pharmacology.*** (McGraw Hill / Medical 14th edition. 2018) ISBN: 978-0-07-176402-5

Suggested Additional Resources:

2. Karen Whalen, Richard Finkel, Thomas A. Panavelil. ***Pharmacology (Lippincott Illustrated Reviews Series)*** (Wolters Kluwer 6th edition 2015) ISBN 978-1-4511-9177-6

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. Be able to retrieve relevant information about the drug from trusted online and offline resources.

Intended Learning Outcomes

A. Knowledge and Understanding

A1-Identify the pathophysiology, etiology, and clinical features of diseases and medical conditions mentioned in the course.

A.2- Recognize the basic pharmacology of different classes of CNS, endocrine system medications as well as the medications that affect blood and inflammation.

A.3- Recognize the prototype drugs that work on one or more of the human body's system(s).

A.4- Identify the main sources that can be used to get information about pharmacology.

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

B.1- Correlate some symptoms to a possible side effect of certain drugs.

B.2- Relate between drug effect and 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.

B.3-Distinguish the pharmacokinetic proprieties between medications in the same group and how that is important in drug selection according to patient's condition.

C. Approach to Practice Pharmacy:

C.1- Apply learned information to optimize patient therapy based on patient condition.

C.2- Predict some of the expected side effects of the drugs affecting the CNS, endocrine system and the ones that work on blood and inflammation.

D. Personal and Professional Development:

D.1- Create effective communication with patients and other health care providers about the effectiveness and safety of drugs that affect CNS, endocrine system drugs and drugs that work on blood and inflammation.

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: **00962-5-3903333** **Extension:** **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.

On average, students need to spend 15 hrs of study and preparation weekly. At the beginning of the lectures, be on time and don't leave before the end of the lecture without an accepted excuse. **If you missed a class, it is your responsibility to find out about any announcements or assignments you have missed.** For any clarification, please communicate your instructor at her posted office hours or by appointment. Listen well to the lecture, if you have a question, ask your instructor. You will find the course material at the course team after the lecture.

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.

Missed Assessments

In all cases of assessment, students who fails to attend an exam on the scheduled date without prior permission, and/or are unable to provide a medical note, will automatically receive a failure .grade for this part of the assessment

- 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.

Cheating

Cheating, academic disconduct, 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%	~ 6th week
Second Exam	30%	~ 10th week
Final Exam	40%	~ 15th /16th week

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 a combination of multiple choice, short answer, match, true and false and/or descriptive questions.

No make-up exams, homework or quizzes will be given. Only documented absences will be considered as per HU guidelines.

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

"Lecture hours and weeks are approximate and may change as needed"

Note: For the 2 lecture periods per week (S/T, M/W), one lecture period covers 1.5 lecture hours (75 minutes). The course content specifies chapters of the textbook that will be included in exams.

Course Content					
Week Number	**No. of Hours**	**CILOs**	**Subject**	**Delivery Methods**	**Assessment Methods**
1	3	A,B,C,D	**Drugs that Act in the Central Nervous System** Sedative-Hypnotic Drugs and Alcohols	Power point presentation	First exam, Final exam
2	3	A,B,C,D	Antiseizure Drugs	Power point presentation	First exam, Final exam
3	3	A,B,C,D	Pharmacologic Management of Parkinsonism & Other Movement Disorders	Power point presentation	First exam, Final exam
4	3	A,B,C,D	General anesthetics, Skeletal muscle relaxants	Power point presentation	First exam, Final exam
5	3	A,B,C,D	-Antipsychotic Agents, Antidepressant Agents	Power point presentation	First exam, Final exam
6	3	A,B,C,D	Opioid analgesics	Power point presentation	Second exam, Final exam
7	3	A,B,C,D	**Drugs with important action on smooth muscles:** Histamine, Serotonin and ergot alkaloids The eicosanoids Drugs used in Asthma	Power point presentation	Second exam, Final exam
8	3	A,B,C,D	**Drugs used to treat diseases of inflammation:** Nonsteroidal Anti-Inflammatory Drugs, Nonopioids Analgesics	Power point presentation	Second exam, Final exam
9	3	A,B,C,D	Drugs Used in Gout Disease-Modifying Antirheumatic Drugs	Power point presentation	Second exam, Final exam
10	3	A,B,C,D	**Endocrine Drugs** Hypothalamic & Pituitary Hormones	Power point presentation	Final exam
11	2	A,B,C,D	Thyroid and antithyroid drugs	Power point presentation	Final exam
11+12	2	A,B,C,D	Adrenocorticosteroids & Adrenocortical Antagonists	Power point presentation	Final exam
12+ 13	4	A,B,C,D	Pancreatic hormones and antidiabetic drugs	Power point presentation	Final exam
14	3	A,B,C,D	Gonadal hormones and inhibitors	Power point presentation	Final exam
15+ 16			**University Final Exams**		