



Course E-Syllabus

1	Course title	Therapeutics 4			
2	Course number	1203506			
2	Credit hours	3			
3	Contact hours (theory, practical)	3 (theory)			
4	Prerequisites/corequisites	Prerequisite: 1203401 (Pharmacology 2)			
5	Program title	PharmD			
6	Program code				
7	Awarding institution	The University of Jordan			
8	School	Pharmacy			
9	Department	Biopharmaceutics & Clinical Pharmacy			
10	Level of course	Undergraduate			
11	Year of study and semester (s)	the second semester of the 5th year			
12	Final Qualification	PharmD			
13	Other department (s) involved in teaching the course	None			
14	Language of Instruction	English			
15	Teaching methodology	□Blended ⊠Online			
16	Electronic platform(s)				
17	Date of production/revision	18 Feb 2021			

18 Course Coordinator:

	Prof. Nail	ya Bulatova-Younes.	. MD.	. PhD
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Phone number: 5 355 000, Ext. 23350.

E-mail: nyounes@ju.edu.jo

19 Other instructors:

Name: Prof. Abla Albsoul

Office

Phone 5 355 000, Ext. 23294. E-mail: ablabsoul@ju.edu.jo Office hours to be announced

20 Course Description:

Will cover the pathophysiology, clinical presentations, pharmacotherapy (pharmacokinetics & pharmacodynamics, drug/drug interactions, dosage calculations, adverse effects, treatment algorithm, goals of therapy & patient education) of: selected critical care, blood conditions, pain, perioperative care & women health issues.

21 Course aims and outcomes:

A- Aims:

Describe the clinical manifestations of selected critical care, blood conditions, pain & women health issues. Understand the clinical issues of medication use

Provide patient education about disease and medications

Recommend the most appropriate pharmacological and nonpharmacological treatment for a selected patient.

B- Course Intended Learning Outcomes (ILOs):

Upon successful completion of this course students will be able to:

A] Foundational Knowledge

Develop, integrate, and apply knowledge from the foundational sciences in clinical sciences (learner) Remember

1) Recall facts, terms, basic concepts, and information regarding: selected critical care, blood conditions, pain & women health issues; clinical uses, pharmacokinetics, clinically significant side effects, drug interactions and contraindications to medications used in the management of the above mentioned conditions

Understand

2) Explain and outline goals of therapy within the context of diseases' clinical manifestations and complications of diseases; and within the context of medications pharmacokinetics and pharmacodynamics behaviors

Applying

- 3) Identifying drug related problems resorting to gained knowledge and guidelines Analyze
- 4) Examine and inspect subjective and objective evidence related to simulated cases to: prioritize patients' needs; recommend appropriate pharmacotherapy treatment; and recommend appropriate monitoring plan.
- B] Skills essential to practice pharmacy

Proactively investigate new knowledge, approaches or behavior and takes steps to evaluate and improve performance (Self-learner)

- 5) Proactively investigate, collect and interpret information related to diseases and their management through browsing the internet based professional web sites, medical guidelines & journal databases (MEDLINE, e-library)
- C] Attitudes and behaviors necessary for personal and professional development Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society (Professional)
- 6) Demonstrate integrity by not cheating and not committing plagiarism
- 7) Demonstrate respect to professors and classmates by observing active listening inside the classroom

Upon successful completion of this course students will be able to:

Develop, integrate, and apply knowledge from the foundational sciences in clinical sciences (learner) 1) Recall facts, terms, basic concepts, and information regarding: selected critical care, blood conditions, pain & women health issues; clinical uses, pharmacokinetics, clinically significant side effects, drug interactions and contraindications to medications used in the management of the above mentioned conditions

- 2) Explain and outline goals of therapy within the context of diseases' clinical manifestations and complications of diseases; and within the context of medications pharmacokinetics and pharmacodynamics behaviors
- 3) Identifying drug related problems resorting to gained knowledge and guidelines

4) Examine and inspect subjective and objective evidence related to simulated cases to: prioritize patients' needs; recommend appropriate pharmacotherapy treatment; and recommend appropriate monitoring plan.

Proactively investigate new knowledge, approaches or behavior and takes steps to evaluate and improve performance (Self-learner)

5) Proactively investigate, collect and interpret information related to diseases and their management through browsing the internet based professional web sites, medical guidelines & journal databases (MEDLINE, e-library)

Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society (Professional)

- 6) Demonstrate integrity by not cheating and not committing plagiarism
- 7) Demonstrate respect to professors and classmates by observing active listening inside the classroom

Learning skills:

Critical thinking
Digital literacy
Problem-solving skills
Self-directed learning

22. Course Material and Announcements

Students need to use the MS Teams in order to get access to the lectures that will be conducted live. All lecture hand-outs, recordings which will be uploaded there.

In addition, course related announcements and exam results will be posted on the MS Teams and is the responsibility of each student to check the site regularly.

The MS Teams will be used for assignment submission as well. For the exams, the University MOODLE (LMS platform) will be used.

23. Topic Outline and Schedule:

1.						
Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference	
- Introduction - Pain Management	1	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in each lecture. General references provided below	
- Pain management - Perioperative care	2	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in each lecture. General references	

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					provided
					below
- Perioperative	3	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in
care					each lecture.
					General
					references
					provided
					below
- Sepsis and septic	4	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in
shock			111 1, 21, 61 2		each lecture.
SHOCK					General
					references
					provided
					below
A '11	-	D CN 1	A1 4 D1 C1 2	E	
- Acid-base	5	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in
disorders					each lecture.
					General
					references
					provided
					below
- Disorders of	6	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in
water & sodium					each lecture.
homeostasis					General
					references
					provided
					below
- Disorders of	7	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in
calcium &	1	1 Ton Tranya	711 1, 51, 61 2	Laums	each lecture.
phosphorous					General
homeostasis					references
HUIHEUSTASIS					provided
					below
D' I C	0	D CN 1	A1 4 D1 C1 2	T.	
- Disorders of	8	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in
potassium &					each lecture.
magnesium					General
homeostasis					references
					provided
					below
- Anemias	9	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in
					each lecture.
					General
					references
					provided
					below
- Perimenopausal	10	Prof. Nailya	A1-4, B1, C1-2	Exams	Specified in
management					each lecture.
					General
					references
					provided
					below
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- Menstruation- related disorders	11	Prof. Abla	A1-4, B1, C1-2	Exams	Specified in each lecture. General references provided below
- Menstruation- related disorders	12	Prof. Abla	A1-4, B1, C1-2	Exams	Specified in each lecture. General references provided below
- Pregnancy complications	13	Prof. Abla			
- Drugs in pregnancy & lactation	14	Prof. Abla	A1-4, B1, C1-2	Exams	Specified in each lecture. General references provided below
1. Final Exam	15				

24. Evaluation Methods:

Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

- 1. Exams & quizzes
- 2. Assignment

Learning skills:

- 1. Critical thinking
- 2. Digital literacy
- 3. Problem-solving skills
- 4. Self-directed learning

Program Competencies Achieved:

- 2.3 Identify pathophysiological basis of major human diseases
- 2.4 Assess symptoms and diagnostic tests and correlate them with associated diseases
- 2.8 Identify indications, side effects and contraindications of medicines
- 2.9 Identify drug-drug and drug-food interactions of medicines
- 2.15 Verify that patient therapy is based on best scientific evidence available
- 2.17 Advise patients and other health professionals on proper usage of medicines including their strength, frequency, dosage form and route of administration
- 2.18 Identify any medicament-related problems and take appropriate actions to resolve them
- 2.19 Recommend necessary modifications to patient therapy to optimize its safety and efficacy

- 7.4 Follow new advances in science related to the profession
- 7.5 Utilize information technology tools to enhance working experience

25 Course Requirements:

Students should have an electronic device that will enable them to connect to MS Teams (e.g., laptop, tablet or stationary PC, smartphone), internet connection, and the university account on MS Teams and LMS platforms

26 Course Policies:

- Attendance policies:

Attendance: Mandatory.

First warning – with 4 absences

Last warning – with 5 absences

Failing in the subject – with 6 absences

B- Absences from exams and handing in assignments on time:

Will result in zero achievement unless health report or other significant excuse is documented.

C- Health and safety procedures:

NA

D- Honesty policy regarding cheating, plagiarism, misbehavior:

The participation, the commitment of cheating will lead to applying all following penalties together

- 1) Failing the subject he/she cheated at
- 2) Failing the other subjects taken in the same course
- 3) Not allowed to register for the next semester. The summer semester is not considered as a semester
- E- Grading policy:

Exams and Quizzes.

Midterm exam: 30 points
Assignment and/or quizzes 20 points
Final Exam: 50 points
Total 100 points

Timing and distribution of assignments/quizzes:

Quiz 1: week 3 (5 points)

Quiz 2: week 11-12 (5 points)

Assignment regarding medication use in COVID 19: week 6-7 (9 points)

Participation mark (answering or asking questions at lectures): 1 point.

F- Available university services that support achievement in the course:

Classrooms, internet classes

27 References:

- A- Required book (s), assigned reading and audio-visuals:
 - 1. Pharmacotherapy: A Pathophysiological Approach, ed. DiPiro, 11th edition
 - 2. Applied Therapeutics: The Clinical Use of Drugs, ed. Koda-Kimble, 11th edition
 - 3. Disease management guidelines (specified in lecture notes)
- B- Recommended books, materials, and media:

Basic & Clinical Pharmacology, ed. Katzung, 14th edition

28 Additional information:
Name of Course Coordinator: Prof. Nailya Bulatova Signature: Date: 18 Feb 2020
Head of Curriculum Committee/Department: Signature:
Head of Department: Dr. Maysa Suyagh Signature:
Head of Curriculum Committee/Faculty: Signature:
Dean: Prof. Rana Abu Dahab Signature: