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Development Academic Center & Quality Assurance

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جامعة 21 سبتمبر

للعلوم الطبية والتطبيقية

مركز التطوير الأكاديمي وضمان الجودة

University of 21 September for Applied and Medical Sciences

Faculty of Clinical Pharmacy

Master of Clinical Pharmacy

Course Specification of Therapeutics-II

Course No. (CPh105)

2021/2022

Prepared by:	Reviewed by:	Head of the Department:	Quality Assurance head	Dean:
Dr. Ali Alyahawi	Dr. -----			

I. Course Identification and General Information:

1	**Course Title:**	Therapeutics- II			
2	**Course Code & Number:**	CPh105			
3	**Credit Hours:**	**Credit Hours**	**Theory Hours**		**Lab. Hours**
			Lecture	**Seminar**	
		3	2	1	--
4	**Study Level/ Semester at which this Course is offered:**	-Level 1 / Semester 2			
5	**Pre –Requisite (if any):**	Therapeutics-I			
6	**Co –Requisite (if any):**	None			
7	**Program (s) in which the Course is Offered:**	Master Degree in Clinical Pharmacy			
8	**Language of Teaching the Course:**	English			
9	**Study System:**	Semester based System			
10	**Mode of Delivery:**	Full Time			
11	**Location of Teaching the Course:**	Faculty of Clinical Pharmacy			
12	**Prepared by:**	Dr. Ali Alyahawi			
13	**Date of Approval:**				

II. Course Description:

The course content aims to understand the pathophysiology and clinical presentation of selected respiratory diseases, renal diseases, infectious diseases, haematology diseases, and general supportive care of oncology diseases & explain the rationale for drug therapy. This pharmacotherapy course is supported by pharmaceutical care of selected cases study by seminar discussion.

	III. Course Intended Learning Outcomes (CILOs): Upon successful completion of the course, students will be able to:	Referenced PILOs Learning out of program
	A. Knowledge and Understanding:	
a1	Describe the pathophysiology and clinical manifestations of related diseases.	A1, A2
a2	Define the principles of drugs action, clinical uses, drug interactions, adverse effects of related drugs, and the target goals of treatment for selected respiratory diseases, renal diseases, infectious diseases, haematology diseases, and general supportive care of oncology diseases.	A1, A2
	B. Intellectual Skills:	
b1	Construct appropriate drugs regimen and monitoring plan of selected respiratory diseases, renal diseases, infectious diseases, haematology diseases, and general supportive care of oncology diseases based on current treatment guidelines.	B1, B2
	C. Professional and Practical Skills:	
c1	Use properly drugs regimen and monitoring parameters based on current guidelines to achieve targeted therapeutic outcomes of selected respiratory diseases, renal diseases, infectious diseases, haematology diseases, and general supportive care of oncology diseases.	C1,C2
c2	Provide a correct information to the health care team regarding therapeutic goals and rational drugs selection.	C3
	D. Transferable Skills:	
d1	Search efficiently for required medical information in professional medical references and sites.	D2
d2	Communicate effectively and ethically with a healthcare team and patients	D1

(a) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
a1- Describe the pathophysiology, laboratory tests, physical examination, diagnosis, and prognosis of cardiovascular and endocrine diseases.	Lecture Instructor – student Interactive Office hour	Exam Assignment
a2- List the target goals of treatment for cardiovascular and endocrine diseases	Lecture Instructor – student Interactive Office hour	Exam Assignment

(b) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	**Teaching strategies**	**Assessment Strategies**
b1- Construct appropriate drugs regimen and monitoring plan of cardiovascular and endocrine diseases.	Lecture Instructor – student Interactive Exercises Solving Problem Methods	Problem-Solving Exercises. Assignment

(c) Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
C1- Use properly drugs regimen and monitoring parameters to achieve targeted therapeutic outcomes of cardiovascular and endocrine diseases	Lecture Instructor – student Interactive Self-Learning	Exam Assignment
C2- Provide a correct information to the health care team regarding therapeutic goals and rational drugs selection.	Lecture Instructor – student Interactive Self-Learning	Exam Assignment

(d) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1- Search efficiently for required medical information in professional medical references and sites.	Self-Learning Seminar Exercises	Presentation Assignment

d2- Communicate effectively and ethically with a healthcare team and patients	Seminar Instructor–student Interactive Exercises	Presentation

IV. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours
1	**Respiratory Diseases**	a 1, a2, b1, c1,c2, d1, d2	- Respiratory Asthma	1	2
			- Chronic Obstructive Pulmonary Diseases (COPD)	1	2
2	**Renal diseases**	a 1, a2, b1, c1,c2, d1, d2	- Acute renal failure	1	2
			- Chronic renal failure	1	2
			- Dialysis & renal transplantation	1	2
3	**Infectious Diseases**	a 1, a2, b1, c1,c2, d1, d2	- Lower Respiratory tract infections	1	2
			- Infectious diarrhea	1	2
4	**Midterm Exam**	a 1, a2, b1, c1,c2, d1		**1**	**2**
5	**Infectious Diseases**	a 1, a2, b1, c1,c2, d1, d2	- Urinary tract infections	1	2
			- CNS infections	1	2
			- Surgical prophylaxis	1	2
6	**General supportive care in oncology**	a 1, a2, b1, c1,c2, d1, d2	- Introduction for cancer chemotherapy	1	2
			- Common complications of cancer chemotherapy	1	2
7	**Hematology Diseases**	a 1, a2, b1, c1,c2, d1, d2	- Anemia	1	2
			- Coagulation Disorders	1	2
8	- Acid–Base Disturbances		Self-reading		
9	- Fluids and Electrolytes		Self-reading		
10	**Final Exam**	a 1, a2, b1, c1,c2, d1		**1**	**2**
Number of Weeks /and Units Per Semester				**16**	**32**

B. Case Studies and Practical Aspect:

No.	Topic of case Presentation	Week Due	Contact Hours	Learning Outcomes (CILOs)
1	- Acute & Chronic Asthma	1	1	a 1, a2, b1, c1,c2, d1, d2
2	- COPD	2	1	a 1, a2, b1, c1,c2, d1, d2
3	- Acute renal injury	3	1	a 1, a2, b1, c1,c2, d1, d2
4	- CKD & End-stage kidney disease	4	1	a 1, a2, b1, c1,c2, d1, d2
5	- Acute pyelonephritis	5	1	a 1, a2, b1, c1,c2, d1, d2
6	- Lower urinary tract infection	6	1	a 1, a2, b1, c1,c2, d1, d2
7	- Bacterial meningitis	7	1	a 1, a2, b1, c1,c2, d1, d2
8	- Antimicrobial prophylaxis for surgery	8	1	a 1, a2, b1, c1,c2, d1, d2
9	- Iron-deficiency anemia	9	1	a 1, a2, b1, c1,c2, d1, d2
10	- Coagulation Disorders	10	1	a 1, a2, b1, c1,c2, d1, d2
11	- Common complications of cancer chemotherapy)	11	1	a 1, a2, b1, c1,c2, d1, d2
12	- Chronic Myeloid Leukemia (CML)	12	1	a 1, a2, b1, c1,c2, d1, d2
13	- Selected Course Topics Seminars	13-14	2	a 1, a2, b1, c1,c2, d1, d2
Number of Weeks /and Units Per Semester		**14**	**14**	

C. Tutorial Aspect: (ان وجدت)

No.	Tutorial	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)

No.	Tutorial	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Number of Weeks /and Units Per Semester				

V. Teaching Strategies of the Course:

Lecture
Instructor – student Interactive
Case Discussion
Office hours
Seminar
Assignment
Self-Learning

VI. Assessment Methods of the Course:

Exam
Assignments
Quiz

VII. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark

1	**Assignment 1:** Each student presents selected case and or a recent article on updates in CVD and participation in class case discussion	a 1, a2, b1, c1,c2, d1, d2	Week 3-9	5
2	**Assignment 2:** Each student presents selected case and or a recent article on updates in endocrine diseases and participation in class case discussion	a 1, a2, b1, c1,c2, d1, d2	Week 10-13	5
Total				10

VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Assignments	Week 3-13	10	10%	a 1, a2, b1, c1,c2, d1, d2
2	Quiz 1	Week 6	5	5%	a 1, a2, b1, c1,c2, d1
3	Midterm Exam	Week 8	20	20%	a 1, a2, b1, c1,c2, d1, d2
4	Quiz 2	Week 12	5	5%	a 1, a2, b1, c1,c2, d1
5	Cases Presentation	Week 3-13	20	20%	a 1, a2, b1, c1,c2, d1, d2
6	Final Exam	Week 16	40	40%	a 1, a2, b1, c1,c2, d1
Total			100	100%	

IX. Learning Resources:

- *Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).*

1- Required Textbook(s) (maximum two).

1- Chisholm-Burns et al, 2019. Pharmacotherapy principles & practice. ed. , 5th edition
2- Katzung, 2018. Basic & Clinical Pharmacology, ed., 14th edition.

2- Essential References.

1 -DiPiro et al, 11th edition, 2020. Pharmacotherapy: A Pathophysiological Approach, ed. edition.
2. Carolin, 2018. Applied Therapeutics: The Clinical Use of Drugs, 11th edition.
3. Walker & Whittlesea, 6th edition, 2018.Clinical Pharmacy and Therapeutics, ed. Walk Whittlesea, 6th edition, 2018.

3- Electronic Materials and Web Sites *etc*.

	1 -www.accesspharmacy.com 2 -Disease management guidelines (specified in lecture notes)

X. Course Policies: (Based on the Uniform Students' By law (2007)	
1	**Class Attendance:** Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	**Tardiness:** A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	**Exam Attendance/Punctuality:** No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	**Assignments & Projects:** Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	**Cheating:** Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	**Forgery and Impersonation:** Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply**.**
7	**Other policies:** The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.

University of 21 September for Applied and Medical Sciences

Faculty of Clinical Pharmacy

Program of Master in Clinical Pharmacy

Course Plan (Syllabus) of Therapeutics-II

Course No. (CPh105)

2021/2022

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:	**Dr. Ali Alyahawi**	**Office Hours**					
Location& Telephone No.:	**775957401**						
E-mail:	**alyahawipharm@yahoo.com**	SAT	SUN	MON	TUE	WED	THU

II. Course Identification and General Information:

1	**Course Title:**	Therapeutics- II			
2	**Course Code & Number:**	CPh105			
3	**Credit Hours:**	**Credit Hours**	**Theory Hours**		**Lab. Hours**
			Lecture	**Seminar**	
		3	2	1	--
4	**Study Level/ Semester at which this Course is offered:**	-Level 1 / Semester 2			
5	**Pre –Requisite (if any):**	Therapeutics-I			
6	**Co –Requisite (if any):**	None			
7	**Program (s) in which the Course is Offered:**	Master Degree in Clinical Pharmacy			
8	**Language of Teaching the Course:**	English			
9	**Study System:**	Semester based System			
10	**Mode of Delivery:**	Full Time			
11	**Location of Teaching the Course:**	Faculty of Clinical Pharmacy			
12	**Prepared by:**	Dr. Ali Alyahawi			
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III. Course Description:

The course content aims to understand the pathophysiology and clinical presentation of selected respiratory diseases, renal diseases, infectious diseases, haematology diseases, and general supportive care of oncology diseases & explain the rationale for drug therapy. This pharmacotherapy course is supported by pharmaceutical care of selected cases study by seminar discussion.

IV. Course Intended Learning Outcomes (CILOs) :

Upon successful completion of the Course, student will be able to:

	A**. Knowledge and Understanding:**	
a1	Describe the pathophysiology and clinical manifestations of related diseases.	
a2	Define the principles of drugs action, clinical uses, drug interactions, adverse effects of related drugs, and the target goals of treatment for selected respiratory diseases, renal diseases, infectious diseases, haematology diseases, and general supportive care of oncology diseases.	
	B**. Intellectual Skills:**	
b1	Construct appropriate drugs regimen and monitoring plan of selected respiratory diseases, renal diseases, infectious diseases, haematology diseases, and general supportive care of oncology diseases based on current treatment guidelines.	
	C. Professional and Practical Skills:	
c1	Use properly drugs regimen and monitoring parameters based on current guidelines to achieve targeted therapeutic outcomes of selected respiratory diseases, renal diseases, infectious diseases, haematology diseases, and general supportive care of oncology diseases.	
c2	Provide a correct information to the health care team regarding therapeutic goals and rational drugs selection.	
	D. Transferable Skills:	
d1	Search efficiently for required medical information in professional medical references and sites.	
d2	Communicate effectively and ethically with a healthcare team and patients	

V. Course Contents:

A. Theoretical Aspect:

Order	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
1	**Respiratory Diseases**	- Respiratory Asthma	1	2
		- Chronic Obstructive Pulmonary Diseases (COPD)	1	2
2	**Renal diseases**	- Acute renal failure	1	2
		- Chronic renal failure	1	2
		- Dialysis & renal transplantation	1	2
3	**Infectious Diseases**	- Lower Respiratory tract infections	1	2
		- Infectious diarrhea	1	2
4	**Midterm Exam**		**1**	**2**
5	**Infectious Diseases**	- Urinary tract infections	1	2
		- CNS infections	1	2
		- Surgical prophylaxis	1	2
6	**General supportive care in oncology**	- Introduction for cancer chemotherapy	1	2
		- Common complications of cancer chemotherapy	1	2
7	**Hematology Diseases**	- Anemia	1	2
		- Coagulation Disorders	1	2
8	- Acid–Base Disturbances	Self-reading		
9	- Fluids and Electrolytes	Self-reading		
10	**Final Exam**		**1**	**2**
Number of Weeks /and Units Per Semester			**16**	**32**

B. Case Studies and Practical Aspect:			
No.	**Topic of case Presentation**	**Week Due**	**Contact Hours**
1	- Acute & Chronic Asthma	1	1
2	- COPD	2	1
3	- Acute renal injury	3	1
4	- CKD & End-stage kidney disease	4	1
5	- Acute pyelonephritis	5	1
6	- Lower urinary tract infection	6	1
7	- Bacterial meningitis	7	1
8	- Antimicrobial prophylaxis for surgery	8	1
9	- Iron-deficiency anemia	9	1
10	- Coagulation Disorders	10	1
11	- Common complications of cancer chemotherapy)	11	1
12	- Chronic Myeloid Leukemia (CML)	12	1
13	- Selected Course Topics Seminars	13-14	2
Number of Weeks /and Units Per Semester		**14**	**14**

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3	- Acute renal injury	3	1
4	- CKD & End-stage kidney disease	4	1
5	- Acute pyelonephritis	5	1

No.	Topic of case Presentation	Week Due	Contact Hours
6	- Lower urinary tract infection	6	1
7	- Bacterial meningitis	7	1
8	- Antimicrobial prophylaxis for surgery	8	1
9	- Iron-deficiency anemia	9	1
10	- Coagulation Disorders	10	1
11	- Common complications of cancer chemotherapy)	11	1
12	- Chronic Myeloid Leukemia (CML)	12	1
13	- Selected Course Topics Seminars	13-14	2
Number of Weeks /and Units Per Semester		**14**	**14**

C. Tutorial Aspect:

No.	Tutorial	Number of Weeks	Contact Hours
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Number of Weeks /and Units Per Semester			

VI. Teaching Strategies of the Course:

Lecture
Instructor – student Interactive
Case Discussion
Office hours
Seminar
Assignment
Self-Learning

VII. Assessment Methods of the Course:

Exam

Assignments

Quiz

VIII. Assignments:

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IX. Schedule of Assessment Tasks for Students During the Semester:

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X. Learning Resources:

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1- Required Textbook(s) (maximum two).	
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2- Essential References.	
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3- Electronic Materials and Web Sites *etc*.	
	1 -www.accesspharmacy.com 2 -Disease management guidelines (specified in lecture notes)

XI. Course Policies: (Based on the Uniform Students' Bylaw (2007)

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