

**REPUBLIC OF YEMEN**

**21 SEPTEMBER UMAS**

**Development Academic Center &  
Quality Assurance**



الجامعة اليمنية

جامعة 21 سبتمبر

للعلوم التطبيقية والطبية

مركز التطوير الأكاديمي وضمان الجودة

**University of 21 September for Applied and Medical Sciences  
Faculty of Clinical Pharmacy**

**Program of Master in Clinical Pharmacy**

Course Specification of Pharmaceutical Care

Course No (CPh103)

**2021/2022**

## I. Course Identification and General Information:

1	Course Title:	Pharmaceutical Care				
2	Course Code & Number:	CPh103				
3	Credit hours:	C.H				TOTAL
		Th.	Seminar	Pr	Tr.	
		2		-	-	2
4	Study level/ semester at which this course is offered:	Level 1 / Semester 1				
5	Pre –requisite (if any):	---NA				
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:	Regular-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:

This professional course aims to improve the students skills with a systematic approach to patient-centred pharmaceutical care that use the theoretical and basic principles of pharmacology, therapeutic and clinical courses to identify and resolve different treatment related problems.

III. Course Intended learning outcomes (CILOs):		Referenced PILOs
a.1	Discuss the basic concepts of patient-centred pharmaceutical care and clinical pharmacy practice	A1, A2
a.2	Describe the different types of patient and drug related problems.	A1, A2
b.1	Construct a pharmaceutical care plan for each medical condition	B 1, B2
b.2	Identify drug therapy problems and design appropriate interventions	B 1, B2
c.1	Apply the appropriate pharmacotherapy regimens and monitoring plans for medical conditions	C1, C2, C3
d.1	Communicate effectively with patients and other healthcare professionals	D1
d.2	Search properly for medical information from professional medical sites and references.	D2

**(a) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<b>a1-</b> Discuss the basic concepts of patient-centred pharmaceutical care and clinical pharmacy practice	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Office hours</li> <li>- Role plays</li> <li>- Case Presentation</li> </ul>	<ul style="list-style-type: none"> <li>- Exam</li> <li>- Quizzes</li> <li>- Assignment</li> </ul>
<b>a2-</b> Describe the different types of patient and drug related problems.	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Office hours</li> <li>- Role plays</li> <li>- Case Presentation</li> </ul>	<ul style="list-style-type: none"> <li>- Exam</li> <li>- Quizzes</li> <li>- Assignment</li> </ul>

**(b) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<b>b1-</b> Construct a pharmaceutical care plan for each medical condition	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Assignment</li> <li>- Office hours</li> <li>- Role plays</li> <li>- Watching videos</li> <li>- Case</li> </ul>	<ul style="list-style-type: none"> <li>- Exam</li> <li>- Assignment</li> <li>- Quiz</li> <li>- Oral presentation</li> </ul>



	<ul style="list-style-type: none"> <li>- Presentation</li> <li>- Seminar</li> </ul>	
<b>b2-</b> Identify drug therapy problems and design appropriate interventions	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Assignment</li> <li>- Office hours</li> <li>- Role plays</li> <li>- Case Presentation</li> <li>- Seminar</li> </ul>	<ul style="list-style-type: none"> <li>- Exam</li> <li>- Assignment</li> <li>- Quiz</li> <li>- Oral presentation</li> </ul>

**(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
<b>C1-</b> Apply the appropriate pharmacotherapy regimens for medical condition	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Assignment</li> <li>- Office hours</li> <li>- Case Presentation</li> <li>- Seminar</li> </ul>	<ul style="list-style-type: none"> <li>- Exam</li> <li>- Assignment</li> <li>- Quiz</li> <li>- Oral presentation</li> </ul>

**(d) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<b>d1-</b> Communicate effectively with patients and other healthcare professionals	<ul style="list-style-type: none"> <li>- Role plays</li> <li>- Case Presentation</li> <li>- Seminar</li> </ul>	<ul style="list-style-type: none"> <li>- Oral presentation</li> </ul>
<b>d2-</b> Search properly for medical information from professional medical sites and references.	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Assignment</li> <li>- Office hours</li> <li>- Case Presentation</li> <li>- Seminar</li> </ul>	<ul style="list-style-type: none"> <li>- Exam</li> <li>- Assignment</li> <li>- Quiz</li> <li>- Oral presentation</li> </ul>



#### IV. Course Content:

##### A – Theoretical Aspect:

Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	contact hours
1	Principles and Concepts of Pharmaceutical Care	a1, a2	- Overview of the pharmaceutical care process	1	2
			- The needs for pharmaceutical care	1	2
			- Barriers to pharmaceutical care	1	2
2	Becoming a Practitioner: The Tools You Will Need	a1, a2	- Terminology - Interpretation of Laboratory data - Managing Medications: Establishing the Safety of the Drug Regimen	1	2
3	Pharmaceutical Care Process: Standards of Care	a 1, a2, b1, b2	- Step 1: Collecting patient data base	1	2
			- Step 2: The Assessment of drug related needs	1	2
			- Step 3: Identification of Drug related Problems	1	2
4	<b>Midterm Exam</b>	a 1, a2, b1, b2		1	2
5	Pharmaceutical Care Process: Standards of Care	a 1, a2, b1, b2	- Step 4: Pharmacy Care Plan	1	2
			- Step 5: Monitoring and follow up	1	
6	Documentation and Consult Notes	a 1	- Consult Notes Forms	1	2
7	Case study	a 1, a2, b1, b2, d1, d2	- Drug-related needs and Drug related problems	1	2
8	The Pharmaceutical Care Case Presentation	a 1, a2, b1, b2, d1, d2	- Patient Case #1 Applying clinical skills in hospitals - Patient Case #2 Applying clinical skills in community - Pharmacy - Patient Case #3 Applying clinical skills in clinics	3	6
9	<b>Final Exam</b>	a 1, a2, b1, b2, d2		1	2
<b>Number of Weeks /and Units Per Semester</b>				<b>16</b>	<b>32</b>



**B - Practical Aspect: (if any)**

Order	Tasks/ Experiments	Number of Weeks	contact hours	Learning Outcomes
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
Number of Weeks /and Units Per Semester				

**V. Teaching strategies of the course:**

- Lectures
- Assignment
- Office hours
- Role plays
- Watching videos
- Case Presentation
- Seminar

**VI. Assignments:**

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	<b>Assignment 1:</b> Develop Evidence Based Pharmaceutical Care for selected CVD	b1, b2, d1, d2	Week 6	5
2	<b>Assignment 2:</b> Develop Evidence Based Pharmaceutical Care for DM type 2	b1, b2, d1, d2	Week 12	5
Total				10

### VII. 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 6, 12	10	10 %	b1, b2, c1, d1, d2
2	Case Presentation	Week 2-14	10	10 %	a 1, a2, b1, b2, c1, d1, d2
3	Midterm Exam	Week 8	20	20 %	a 1, a2, b1, b2, c1, d2
4	Final Exam	Week 16	60	60 %	a 1, a2, b1, b2, c1, d2
<b>Total</b>			100	100%	

### VIII. Learning Resources:

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

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

1. Langely CA, Belcher D, 2009 , Applied Pharmaceutical Practice. 1st ed. Pharmaceutical Press. London. ISBN 978 0 85369 746 6
2. David M. Angaran, Karen Whalen, 2015. Medication Therapy Management: A Comprehensive Approach., 2<sup>nd</sup> edition, ISBN: 978-0-07-184869-5

#### 2- Essential References.

1. Cipolle, RJ, Strand, LM, & Morley, PC, 2012. Pharmaceutical Care Practice: The Patient-Centered Approach to Medication Management Services (3rd edition). ISBN-13: 978-0071756389
2. Robert S. Beardsley, Carole L. Kimberlin, William N. Tindall. 2011. Communication Skills in Pharmacy Practice: A Practical Guide for Students and Practitioners.. ISBN-13: 978-16083160

#### 3- Electronic Materials and Web Sites etc.

- [www.medlineplus.com](http://www.medlineplus.com) (for patient counseling).
- [www.guidelines.gov](http://www.guidelines.gov) (International guidelines)
- [www.drugs.com](http://www.drugs.com) (for drug-drug interactions)
- [www.pubmed.com](http://www.pubmed.com) (Clinical trials).

### 1X. Course Policies: (Based on the Uniform Students' Bylaw (2007))

1	<p><b>Class Attendance:</b> 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.</p>
2	<p><b>Tardiness:</b> A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p>

3	<b>Exam Attendance/Punctuality:</b> 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	<b>Assignments &amp; Projects:</b> Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	<b>Cheating:</b> 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	<b>Forgery and Impersonation:</b> 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	<b>Other policies:</b> 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.

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**University of 21 September for Applied and Medical Sciences**

**Faculty of Clinical Pharmacy**

**Program of Master in Clinical Pharmacy**

**Course Plan (Syllabus) of Pharmaceutical Care**

**Course No (CPh103)**

**2021/2022**

I. - Information about Faculty Member Responsible for the Course:							
Name of Faculty Member	Dr. Ali Alyahawi	Office Hours					
Location & Telephone No.	775957401	SAT	SUN	MON	TUE	WED	THU
E-mail	alyahawipharm@yahoo.com						

II. Course Identification and General Information:						
1	Course Title:	Pharmaceutical Care				
2	Course Code & Number:	CPh103				
3	Credit hours:	C.H				TOTAL
		Th.	Seminar	Pr	Tr.	
		2	--		--	2
4	Study level/ semester at which this course is offered:	-				
5	Pre –requisite (if any):	NA				
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				

III. Course Description:	
<p>This professional course aims to improve the students skills with a systematic approach to patient-centred pharmaceutical care that use the theoretical and basic principles of pharmacology, therapeutic and clinical courses to identify and resolve different treatment related problems.</p>	

#### IV. Course Intended learning outcomes (CILOs)

Upon completion of this Course, student will be able to:

a.1	Discuss the basic concepts of patient-centred pharmaceutical care and clinical pharmacy practice
a.2	Describe the different types of patient and drug related problems.
b.1	Construct a pharmaceutical care plan for each medical condition
b.2	Identify drug therapy problems and design appropriate interventions
c.1	Apply the appropriate pharmacotherapy regimens and monitoring plans for medical conditions
d.1	Communicate effectively with patients and other healthcare professionals
d.2	Search properly for medical information from professional medical sites and references.

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##### A – Theoretical Aspect:

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		- The needs for pharmaceutical care	1	2
		- Barriers to pharmaceutical care	1	2
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3	Pharmaceutical Care Process: Standards of Care	- Step 1: Collecting patient data base	1	2
		- Step 2: The Assessment of drug related needs	1	2
		- Step 3: Identification of Drug related Problems	1	2
4	<b>Midterm Exam</b>		1	2
5	Pharmaceutical Care Process: Standards of Care	- Step 4: Pharmacy Care Plan	1	2
		- Step 5: Monitoring and follow up	1	
6	Documentation and Consult Notes	- Consult Notes Forms	1	2
7	Case study	- Drug-related needs and Drug related problems	1	2
8	The Pharmaceutical Care Case Presentation	- Patient Case #1 Applying clinical skills in hospitals - Patient Case #2 Applying clinical skills in community - Pharmacy - Patient Case #3 Applying clinical skills in clinics	3	6
9	<b>Final Exam</b>		1	2
<b>Number of Weeks /and Units Per Semester</b>			<b>16</b>	<b>32</b>



B - Practical Aspect: (if any)			
Order	Tasks/ Experiments	Week Due	Contact Hours
1	NA		
2			
3			
4			
5			
6			
7			
8			
Number of Weeks /and Units Per Semester		14	28

### VI. Teaching strategies of the course:

- Lectures
- Assignment
- Office hours
- Role plays
- Watching videos
- Case Presentation
- Seminar

### VII. Assignments:

No	Assignments	Week Due	Mark
1	Assignment 1: Develop pharmaceutical care plan for selected CVD	Week 6	5
2	Assignment 2: Develop pharmaceutical care plan for DM type 2	Week 12	5
Total			10

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

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Total			100	100%

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7	<p><b>Other policies:</b> 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.</p>