

Republic of Yemen

Ministry of Higher Education & Scientific Research

21 September University for Medicals and Applied Sciences



Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Specification of

Case Studies in Pharmacotherapy-V: “case-based seminars

Course No. (02.01.269)

2020/2021

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi



I. Course Identification and General Information:

1	Course Title:	Case Studies in Pharmacotherapy V: “case-based seminars”		
2	Course Code & Number:	02.01.269		
3	Credit Hours:	Credit Hours	Theory Hours Lecture Seminar	Training Hours
		1	--	2
4	Study Level/ Semester at which this Course is offered:	5 Level / 2 Semester		
5	Pre –Requisite (if any):	- Pharmacology-IV - Case Studies in Pharmacotherapy-IV: “case-based seminars”		
6	Co –Requisite (if any):	Pharmacotherapy-V		
7	Program (s) in which the Course is Offered:	Bachelor of Clinical Pharmacy & Pharm. D.		
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 cover the pathophysiology and pharmacotherapy (pharmacokinetics & pharmacodynamics, drug/drug interactions, dosage calculations, adverse effects, treatment algorithm, goals of therapy & patient education) of common complications of cancer chemotherapy and hematology conditions. It is designed to improve the students skills of pharmaceutical care delivery by seminar discussion of common complications of cancer chemotherapy and hematology diseases.

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

III. Course Intended Learning Outcomes (CILOs)		Referenced PILOs (Learning out of program)
Knowledge and Understanding: Upon successful completion of the course, students will be able to:		
a1	Define the pathophysiology and goals of therapy of selected cases discussion of oncology and hematology conditions.	A5
a2	Describe the rational pharmacotherapy regimen by seminar discussion for selected clinical cases of oncology and hematology conditions.	A1
B. Intellectual Skills: Upon successful completion of the course, students will be able to:		
b1	Construct an appropriate pharmaceutical care plan to the selected cases of oncology and hematology conditions.	B4, B5
b2	Interpret the clinical and laboratory data for selected cases of oncology and hematology conditions.	B4, B5
C. Professional and Practical Skills: Upon successful completion of the course, students will be able to:		
c1	Apply the optimal pharmacotherapy regimens by seminar discussion for selected clinical cases of oncology and hematology diseases	C3, C4
c2	Educate the patient about disease and medication	C3, C4
D. Transferable Skills: Upon successful completion of the course, students will be able to:		
d1	Search efficiently for information related to diseases and their management through browsing the internet professional sites.	D2, D3
d2	Develop the students' oral presentations skills	D1,

(A) Alignment of Course Intended Learning Outcomes (Knowledge and Understanding) to Teaching Strategies and Assessment Methods:				
Course Intended Learning Outcomes		Teaching Strategies	Assessment Strategies	
a1	Define the pathophysiology and goals of therapy of selected cases discussion of oncology and hematology conditions.	- Assignments - Interactive class discussions - Office hours - Seminars	- Exam - Assignment - Quiz	
a2	Describe the rational pharmacotherapy regimen in	- Assignments - Interactive class discussions	- Exam - Assignment	
Prepared by:		Reviewed by:	Head of the Department:	Vice Dean for Quality affairs
Dr. Ali Alyahawi		Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet
				Dean of College:
				Dr. Ali Alyahawi



	oncology and hematology conditions.	- Office hours - Seminars	Quiz
(B) Alignment of Course Intended Learning Outcomes (Intellectual Skills) to Teaching Strategies and Assessment Methods:			
	Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
b1	Construct an appropriate pharmaceutical care plan to the selected cases of oncology and hematology conditions.	- Assignments - Interactive class discussions - Office hours - Seminars	- Exam - Assignment - Quiz
b2	Interpret the clinical and laboratory data for selected cases of oncology and hematology conditions.	- Assignments - Interactive class discussions - Office hours - Seminars	- Exam - Assignment - Quiz
(C) Alignment of Course Intended Learning Outcomes (Professional and Practical Skills) to Teaching Strategies and Assessment Methods:			
	Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
c1	Apply the optimal pharmacotherapy regimens for oncology and hematology diseases	- Assignments - Interactive class discussions - Office hours - Seminars	- Exam - Assignment - Quiz
c2	Educate the patient disease and medications	- Interactive class discussions - Seminars	- Exam - Assignment - Quiz
(D) Alignment of Course Intended Learning Outcomes (Transferable Skills) to Teaching Strategies and Assessment Methods:			
	Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
d1	Search efficiently for medical information from professional medical sites.	- Assignments - Interactive class discussions - Office hours - Seminars	- Exam - Assignment
d2	Improve the students' presentations	Seminars	Discussion

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi



skills		■ Presentation
--------	--	----------------

IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CLOs)
1	Cases study in Oncology diseases Disorders	- Common complications of cancer chemotherapy - Acute Myeloid Leukemia (AML) - Chronic Myeloid Leukemia (CML) - Prostate Cancer	3 1 2 1	6 2 4 2	a 1, a2, b1, b2, c1, c2, d1, d2
2	Midterm Exam		1	2	a1, a2, b1, b2, c1
3	Cases study in Oncology diseases	Breast Cancer	2	4	a 1, a2, b1, b2, c1, c2, d1, d2
4	Cases study in Hematology Disorders	- Anemia - Coagulation Disorders - Sickle Cell Disease	2 2 1	4 4 2	a 1, a2, b1, b2, c1, c2, d1, d2
5	Final Theoretical Exam		1	2	a 1, a2, b1, b2, c1
Number of Weeks /and Units Per Semester			16	32	

V. Teaching Strategies of the Course:

- Assignments
- Interactive class discussions
- Office hours
- Seminars

VI. Assessment Methods of the Course:

- Assignments

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

- Quiz
- Exam

VII. Assignments:

No.	Assignments	Week Due	Mark	Aligned CILOs (symbols)
1	Case Presentation for Parkinson disease.	Week 3	5	a1, a2, b1, b2, c1, d1, d2
2	Search for updated guideline recommendations for infertility in men.	Week 13	5	a1, a2, b1, b2, c1, d1, d2
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 %	a1, a2, b1, c1, c2 d1, d2
2.	Quiz	Week 6	10	10 %	a1, a2, b1, b2 c1, c2 , d1
3.	Midterm Exam	Week 8	20	20 %	a1, a2, b1, c1
4.	Quiz 2	Week 12	10	10 %	a1, a2, b1, b2, c1, c2 d1
5.	Final Exam	Week 16	50	50 %	a1, a2, b1, c1
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- Marie A. Chisholm-Burns and others, (2016), **Pharmacotherapy: Principles & practice**, 4th edition, McGraw-Hill Companies, Inc., United States of America.
- 2- Joseph Dipiro, (2017), **Pharmacotherapy: pathophysiologic approaches**, 10th edition, McGraw-Hill Companies, Inc., United States of America.

2- Essential References:

- 1- Walker and Edwards, (2012), **Clinical Pharmacy and Therapeutics**, 5th edition.

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

- 2- Koda-Kimble, and others, (2012), **Applied Therapeutics: The Clinical Use of Drugs**, 10th edition, Lippincott Williams & Wilkins , Philadelphia, United States of America.
- 3- **Drug Information Handbook: A Clinically Relevant Resource for All Healthcare Professionals** 25th Edition Lexi Comp; 25 edition (May 2, 2016).
- 4- **Pharmacotherapy Casebook: A Patient-Focused Approach, Tenth Edition (Pharmacy)** 10th Edition, McGraw-Hill Education; 10 edition (January 4, 2017)

3- Electronic Materials and Web Sites etc.:

- 1- [Word Document or Portable Data Files \(PDF\) for Lectures Delivery.](#)
- 2- [American College of Clinical Pharmacy \(ACCP\) http://www.accp.com](http://www.accp.com)

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.

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

Second Part of Course Specification

Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Specification of

Case Studies in Pharmacotherapy-IV: “case-based seminars”

Course No. (02.01.269)

2021/2022

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

Course Plan (Syllabus) of Case Studies in Pharmacotherapy-IV: “case-based seminars”

Course No. (02.01.269)

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

2021/2022

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

I. Course Identification and General Information:

1	Course Title:	Case Studies in Pharmacotherapy V: “case-based seminars”									
2	Course Code & Number:	02.01.269									
3	Credit Hours:	<table> <tr> <th>Credit Hours</th><th>Theory Hours</th><th>Training Hours</th></tr> <tr> <td></td><td>Lecture</td><td>Seminar</td></tr> <tr> <td>1</td><td>--</td><td>2</td></tr> </table>	Credit Hours	Theory Hours	Training Hours		Lecture	Seminar	1	--	2
Credit Hours	Theory Hours	Training Hours									
	Lecture	Seminar									
1	--	2									
4	Study Level/ Semester at which this Course is offered:	5 Level / 2 Semester									
5	Pre –Requisite (if any):	- Pharmacology-IV - Case Studies in Pharmacotherapy-IV: “case-based seminars”									
6	Co –Requisite (if any):	Pharmacotherapy-V									
7	Program (s) in which the Course is Offered:	Bachelor of Clinical Pharmacy & Pharm. D.									
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 cover the pathophysiology and pharmacotherapy (pharmacokinetics & pharmacodynamics, drug/drug interactions, dosage calculations, adverse effects, treatment algorithm, goals of therapy & patient education) of common complications of cancer chemotherapy and hematology conditions. It is designed to improve the students skills of pharmaceutical care delivery by seminar discussion of common complications of cancer chemotherapy and hematology diseases.

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

III. Course Intended Learning Outcomes (CILOs)

Knowledge and Understanding: Upon successful completion of the course, students will be able to:

- | | |
|----|--|
| a1 | Define the pathophysiology and goals of therapy of selected cases discussion of oncology and hematology conditions. |
| a2 | Describe the rational pharmacotherapy regimen by seminar discussion for selected clinical cases of oncology and hematology conditions. |

B. Intellectual Skills: Upon successful completion of the course, students will be able to:

- | | |
|----|--|
| b1 | Construct an appropriate pharmaceutical care plan to the selected cases of oncology and hematology conditions. |
| b2 | Interpret the clinical and laboratory data for selected cases of oncology and hematology conditions. |

C. Professional and Practical Skills: Upon successful completion of the course, students will be able to:

- | | |
|----|--|
| c1 | Apply the optimal pharmacotherapy regimens by seminar discussion for selected clinical cases of oncology and hematology diseases |
| c2 | Educate the patient about disease and medication |

D. Transferable Skills: Upon successful completion of the course, students will be able to:

- | | |
|----|---|
| d1 | Search efficiently for information related to diseases and their management through browsing the internet professional sites. |
| d2 | Develop the students' oral presentations skills |

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	Cases study in Oncology diseases Disorders	- Common complications of cancer chemotherapy - Acute Myeloid Leukemia (AML) - Chronic Myeloid Leukemia (CML) - Prostate Cancer	3 1 2 1	6 2 4 2	a 1, a2, b1, b2, c1, c2, d1, d2
2	Midterm Exam		1	2	a1, a2, b1, b2, c1
3	Cases study in Oncology diseases	Breast Cancer	2	4	a 1, a2, b1, b2, c1, c2, d1, d2
4	Cases study in Hematology Disorders	- Anemia - Coagulation Disorders - Sickle Cell Disease	2 2 1	4 4 2	a 1, a2, b1, b2, c1, c2, d1, d2
5	Final Theoretical Exam		1	2	a 1, a2, b1, b2, c1
Number of Weeks /and Units Per Semester			16	32	

V. Teaching Strategies of the Course:

- Assignments
- Interactive class discussions
- Office hours
- Seminars

VI. Assessment Methods of the Course:

- Assignments
- Quiz
- Exam

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

VII. Assignments:

No.	Assignments	Week Due	Mark	Aligned CILOs (symbols)
1	Case Presentation for Parkinson disease.	Week 3	5	a1, a2, b1, b2, c1, d1, d2
2	Search for updated guideline recommendations for infertility in men.	Week 13	5	a1, a2, b1, b2, c1, d1, d2
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
6.	Assignments	Week 3-13	10	10 %	a1, a2, b1, c1, c2 d1, d2
7.	Quiz	Week 6	10	10 %	a1, a2, b1, b2 c1, c2 , d1
8.	Midterm Exam	Week 8	20	20 %	a1, a2, b1, c1
9.	Quiz 2	Week 12	10	10 %	a1, a2, b1, b2, c1, c2 d1
10.	Final Exam	Week 16	50	50 %	a1, a2, b1, c1
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):

- Marie A. Chisholm-Burns and others, (2016), **Pharmacotherapy: Principles & practice**, 4th edition, McGraw-Hill Companies, Inc., United States of America.
- Joseph Dipiro, (2017), **Pharmacotherapy: pathophysiologic approaches**, 10th edition, McGraw-Hill Companies, Inc., United States of America.

2- Essential References:

- Walker and Edwards, (2012), **Clinical Pharmacy and Therapeutics**, 5th edition.
- Koda-Kimble, and others, (2012), **Applied Therapeutics: The Clinical Use of Drugs**, 10th edition, Lippincott Williams & Wilkins , Philadelphia, United States of America.
- Drug Information Handbook: A Clinically Relevant Resource for All Healthcare Professionals** 25th Edition Lexi Comp; 25 edition (May 2, 2016).

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

8- **Pharmacotherapy Casebook: A Patient-Focused Approach, Tenth Edition (Pharmacy)**
10th Edition, McGraw-Hill Education; 10 edition (January 4, 2017)

3- **Electronic Materials and Web Sites etc.:**

9- [Word Document or Portable Data Files \(PDF\) for Lectures Delivery.](#)

10- [American College of Clinical Pharmacy \(ACCP\) http://www.accp.com](http://www.accp.com)

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.

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al Mahbashi	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi