

Republic of Yemen
Ministry of Higher Education & Scientific Research
Emirates International University



Faculty of Medicine and Health Sciences

Department of Clinical Pharmacy

Bachelor of Pharm D

**Course Specification of
Oncology clerkship**

Course No. (CR 607)



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Prepared by:

Dr. _____

Reviewed by:

Dr. _____

Head of the Department:

Quality Assurance head

Dean

I. Course Identification and General Information:

1	Course Title:	Oncology clerkship			
2	Course Code & Number:	CR 607			
3	Credit Hours:	Credit Hours	Theory Hours		Lab. Hours
			Lecture	Exercise	
		3	--	--	192 hours
4	Study Level/ Semester at which this Course is offered:	6 Level / 2 Semester			
5	Pre –Requisite (if any):	Pharmacotherapy I-IV			
6	Co –Requisite (if any):	None			
7	Program (s) in which the Course is Offered:	Bachelor of 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 Medicine and Health Sciences			
12	Prepared by:	Dr. Ali Alyahawi			
13	Date of Approval:				

II. Course Description:

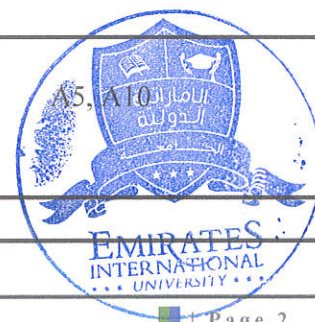
The oncology training course aims to train the students to practice the theoretical and basic principles of pharmacology, therapeutic and clinical courses in selected real hospital oncology cases to identify and resolve different treatment related problems in oncology, regarding supportive care and chemotherapeutic agents.

III. Course Intended Learning Outcomes (CILOs) : (**maximum 8**) Upon successful completion of the course, students will be able to:

Referenced PILOs Learning out of program

A. Knowledge and Understanding:		I, A or E	
a1	Define the updated guidelines of the supportive care for patients are receiving chemotherapy (pain management, cancer-related anemia, etc).	I	A10
a2	Describe the rational use of common cancer chemotherapy in practice (medications' mechanism of action, clinical uses, dosing and monitoring parameters.).	I	

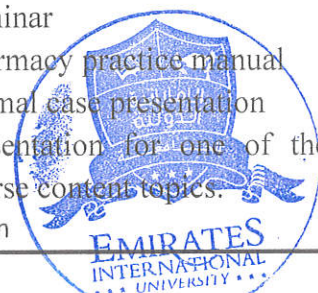
B. Intellectual Skills:



b1	Discuss the most significant treatment-related problems and monitor parameters for selected cases discussion of oncology diseases.	E	B2, B7, B8, B9
b2	Design rational care plan for oncology patients who are receiving chemotherapy.	E	B7
C. Professional and Practical Skills:			
c1	Choose the rational pharmacotherapy recommendations regarding the supportive care of patients who are receiving chemotherapy	A	C5, C8
c2	Provide appropriate patient counseling regarding cancer chemotherapy.	A	C5, C8
D. Transferable Skills:			
d1	Search efficiently for appropriate pharmacotherapy recommendations and properly use of Evidence-Based Medicine (EBM) for controversial area.	A	D5
d2	Share successfully therapeutic recommendations with health care providers and provide a clear information to patients.	A	D1, D3

(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- Define the updated guidelines of the supportive care for patients are receiving chemotherapy (pain management, cancer-related anemia, etc).	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning -	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
a2- Describe the rational use of common cancer chemotherapy in practice (medications' mechanism of action, clinical uses, dosing and monitoring parameters.).	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam



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

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1- Discuss the most significant treatment-related problems and monitor parameters for selected cases discussion of oncology diseases.	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and <i>Problem-based learning</i> -	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
b2- Design rational care plan for oncology patients who are receiving chemotherapy.	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and <i>Problem-based learning</i> -	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam

(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- Choose the rational pharmacotherapy recommendations regarding the supportive care of patients who are receiving chemotherapy	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and <i>Problem-based learning</i>	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
C2- Provide appropriate patient counseling regarding cancer chemotherapy..	Clinical cases studies Discussions & Small group discussions Seminars	- Assignments - Oral case discussions during clinical rounds - Seminar

	Training Self-learning Group learning and Problem-based learning -	- Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
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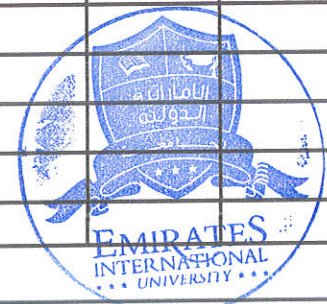
(d) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1- Search efficiently for appropriate pharmacotherapy recommendations and properly use of Evidence-Based Medicine (EBM) for controversial area.	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and Problem-based learning -	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
d2- Share successfully therapeutic recommendations with health care providers and provide a clear information to patients..	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and Problem-based learning -	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam

IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
	n/a	—			
		—			
		—			
		—			
		—			



No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
7	...	- ...			
8	...	- ...			
9	...	- ...			
10	...	- ...			
11	...	- ...			
Number of Weeks /and Units Per Semester					

B. Case Studies and Practical Aspect:

Order	Tasks/ Experiments	Number of Weeks	Contact hours	Learning Outcomes
1	Chemotherapy induced nausea and vomiting	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
2	Pain management	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
3	Anemia related to chemotherapy	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
4	Infection related to cancer	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
5	Myeloid growth factor	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
6	VTE in cancer patient	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
7	Neutropenic fever treatment	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
8	Hypercalcemia in malignancy	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
9	General toxicity of chemotherapy agents -Platinum agents (ex.Cisplatin) -Anthracyclines ex.doxorubicin -Vina alkaloid ex.Vincristine -Methotrexate, Etoposide, Ara-C, Ifosphamide,	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2



	Docetaxel, Infliximab			
10	Common chemotherapy regimen used for cancer	Throughout the rotation	Throughout the rotation	a 1, a2, b1, b2, c1, c2, d1, d2
Number of Weeks /and Units Per Semester: 3 weeks			192 hours	

V. Teaching Strategies of the Course:

- Clinical cases studies
- Discussions & Small group discussions
- Seminars
- Training
- Self-learning
- Group learning and Problem-based learning

VI. Assessment Methods of the Course:

- Assignments
- Oral case discussions during clinical rounds
- Seminar
- Pharmacy practice manual
- Formal case presentation
- Presentation for one of the course content topics.
- Exam

VII. Assignments:

No.	Assignments	Week Due	Mark	Aligned CILOs (symbols)
1	Assignment 1: Develop a pharmaceutical care plan for selected case of oncology supportive care according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, c1, c2, d1, d2	Week 1	5
2	Assignment 2: Develop a pharmaceutical care plan for selected case of oncology supportive care according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, c1, c2, d1, d2	Week 2	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	Week1	10	10%	a1, a2, b1, b2, c1.

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
		y 1-2			c2, d1, d2
2	Oral case discussions during clinical rounds	Weekl y 1-3	10	10%	a 1, a2, b1, b2, c1, c2, d1, d2
3	Pharmacy practice manual	Weekl y 1-3	15	15%	a 1, a2, b1, b2, c1, c2, d1, d2
4	Formal case presentation	Week 3	10	10%	a 1, a2, b1, b2, c1, c2, d1, d2
5	Presentation for one of the course content topics.	Week 3	5	5%	a 1, a2, b1, b2, c1, c2, d1, d2
6	Final exam	Week 3	50	50%	a 1, a2, b1, b2, 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, 2018 , Pharmacotherapy principles & practice. 5rd edition.
2. Katzung, 2018, Basic & Clinical Pharmacology. 14th edition.

2- Essential References.

1. DiPiro et al, 2017, Pharmacotherapy: A Pathophysiological Approach, 10th edition.
2. Caroline S. Zeind and Michael G. Carvalho, 2018, Applied Therapeutics: The Clinical of Drugs, 11th edition.
3. Walker & Whittlesea, 2018. Clinical Pharmacy and Therapeutics, 6 edition.

3- Electronic Materials and Web Sites etc.

- UpToDate
- <http://www.globalrph.com/>
- Updated Clinical Practice Guidelines for selected course disorders

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.



Faculty of Medicine and Health Sciences

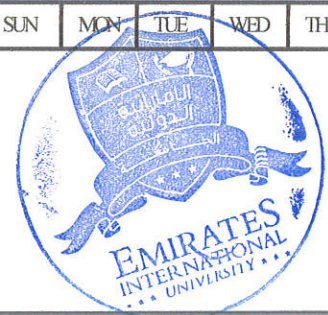
Department of Clinical Pharmacy

Bachelor of Pharm D

Course Specification of Oncology clerkship

Course No. (CR 607)

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



II. Course Identification and General Information:

1	Course Title:	Oncology clerkship			
2	Course Code & Number:	CR 607			
3	Credit Hours:	Credit Hours	Theory Hours		Lab. Hours
			Lecture	Exercise	
		3	--	--	192 hours
4	Study Level/ Semester at which this Course is offered:	6 Level / 2 Semester			
5	Pre –Requisite (if any):	Pharmacotherapy I-IV			
6	Co –Requisite (if any):	None			
7	Program (s) in which the Course is Offered:	Bachelor of 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 Medicine and Health Sciences			
12	Prepared by:	Dr. Ali Alyahawi			
13	Date of Approval:				

III. Course Description:

The oncology training course aims to train the students to practice the theoretical and basic principles of pharmacology, therapeutic and clinical courses in selected real hospital oncology cases to identify and resolve different treatment related problems in oncology, regarding supportive care and chemotherapeutic agents.

IV. Course Intended Learning Outcomes (CILOs) :

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

	A. Knowledge and Understanding:
a1	Define the updated guidelines of the supportive care for patients are receiving chemotherapy (pain management, cancer-related anemia, etc).
a2	Describe the rational use of common cancer chemotherapy in practice (medications' mechanism of action, clinical uses, dosing and monitoring parameters.).
	B. Intellectual Skills:
b1	Discuss the most significant treatment-related problems and monitor parameters for selected cases discussion of oncology diseases.
b2	Design rational care plan for oncology patients who are receiving chemotherapy.
	C. Professional and Practical Skills:
c1	Choose the rational pharmacotherapy recommendations regarding the supportive care of patients who are receiving chemotherapy

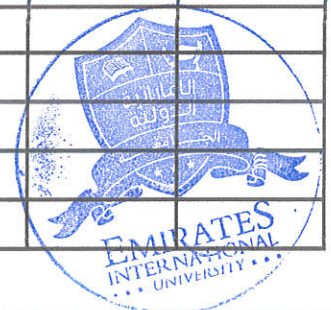
c2	Provide appropriate patient counseling regarding cancer chemotherapy.
D. Transferable Skills:	
d1	Search efficiently for appropriate pharmacotherapy recommendations and properly use of Evidence-Based Medicine (EBM) for controversial area.
d2	Share successfully therapeutic recommendations with health care providers and provide a clear information to patients.

V. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
	n/a	–		
		–		
		–		
		–		
		–		
7	...	– ...		
8	...	– ...		
9	...	– ...		
10	...	– ...		
11	...	– ...		
Number of Weeks /and Units Per Semester				

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
	n/a	–		
		–		
		–		
		–		
		–		
7	...	– ...		
8	...	– ...		
9	...	– ...		
10	...	– ...		



No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
11	...	- ...		
Number of Weeks /and Units Per Semester				

B. Case Studies and Practical Aspect:

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VI. Teaching Strategies of the Course:

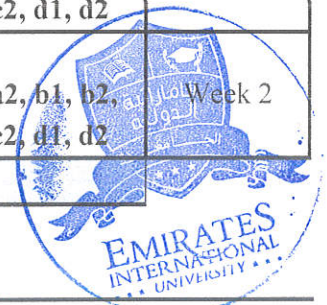
- Clinical cases studies
- Discussions & Small group discussions
- Seminars
- Training
- Self-learning
- Group learning and Problem-based learning

VII. Assessment Methods of the Course:

- Assignments
- Oral case discussions during clinical rounds
- Seminar
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- -Exam

VIII. Assignments:

No.	Assignments	Week Due	Mark
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Total			



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

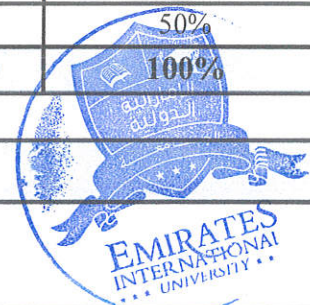
No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
1	Assignments	Weekly 1-2	10	10%
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3	Pharmacy practice manual	Weekly 1-3	15	15%
4	Formal case presentation	Week 3	10	10%
5	Presentation for one of the course content topics.	Week 3	5	5%
6	Final exam	Week 3	50	50%
Total			100	100%

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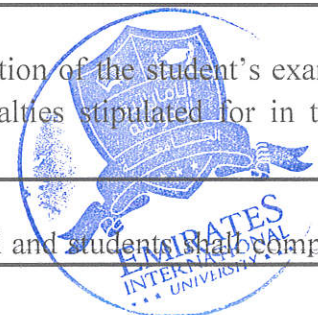
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with all rules and regulations of the examination set by the Department, Faculty and University Administration.

