

Republic of Yemen

Ministry of Higher Education & Scientific Research

21 September University of Medicals & Applied Sciences



Faculty of Clinical Pharmacy

Bachelor of Pharm. D.

Course Specification of **Hospital Training: Intensive Care Unit**

Course No. (02.05.258)

2021/2022

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

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I. Course Identification and General Information:

1	Course Title:	Hospital Training: Intensive Care Unit		
2	Course Code & Number:	02.05.258		
3	Credit Hours:	Credit Hours	Theory Hours	
			Lecture	Exercise
		2	--	--
				2 weeks 72 Contact hrs
4	Study Level/ Semester at which this Course is offered:	6 th Level / 2 nd Semester		
5	Pre –Requisite (if any):	Students must have successfully completed their basic curriculum of 5 th Year.		
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 Clinical Pharmacy		
12	Prepared by:	Dr. Ali Alyahawi		
13	Date of Approval:	2022		

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II. Course Description:

The intensive care unit training course aims to practice the student theoretical knowledge and skills of pharmacology, therapeutic and clinical courses in real hospital cases to identify and resolve different treatment related problems in Intensive Care Unit (ICU). The rotation content will improve student skills to implement pharmaceutical care in the ICU setting.

III. Course Intended Learning Outcomes (CILOs) :

Referenced PILOs
Learning out of
program

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

a1	Understand the roles and responsibilities of the critical care pharmacist in the management of intensive care patients.	A1, A3, A4, A5
a2	Define the rational pharmacotherapy and target goals for the intensive care patients.	A1, A5

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

b1	Construct a treatment plan for assigned patients in the intensive care unit.	B2, B3, B4, B5
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C. Professional and Practical Skills: Upon successful completion of the course, students will be able to:

c1	Apply appropriate pharmacotherapy recommendations for patients in Intensive Care Unit (ICU).	C4
c2	Select the appropriate patient monitoring parameters and target goals for intensive care patients.	C3, C4, C5

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

d1	Share successfully therapeutic recommendations in team-work and develop student skills of patients counseling and educations.	D1
d2	Search properly in the professional medical references for Evidence-Based Medicine (EBM)	D2. D3

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(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 roles and responsibilities of the critical care pharmacist in the management of intensive care patients.	- Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning	- Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
a 2- Discuss the rational pharmacotherapy and target goals for the intensive care patients.	- Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning	- Assignments - Oral case discussions during clinical rounds - 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

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b1- Construct a treatment plan for assigned patients in the intensive care unit.	- Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning	- Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
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© 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- Apply appropriate pharmacotherapy recommendations for patients in Intensive Care Unit (ICU).	- Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning	- Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
C2- Select the appropriate patient monitoring parameters and target goals for intensive care patients.	- Clinical cases studies - Small practical session and discussion	- Assignments - Oral case discussions during clinical

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	- Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning	- rounds - 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- Share successfully therapeutic recommendations in team-work and develop student skills of patients counselling.	- Small practical session and discussion - Seminars	- Oral case discussions during clinical rounds - Formal case presentation - Presentation for one of the course content topics.
d2- Search properly in the professional medical references for Evidence-Based Medicine (EBM).	- Use of advanced database search - Self-learning	- Assignments - Formal case presentation - Presentation for one of the course content topics. - Exam

IV. Course Contents:

A. Theoretical Aspect:

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B. Case Studies and Practical Aspect:

Order	Tasks/ Experiments	Number of Weeks	contact hours	Learning Outcomes
1	Critical care: - Mechanical ventilation - Acid-base disorder - Acute decompensated heart failure - Stress induce-ulcer prophylaxis - Choosing the sedative agents - Sepsis and septic shock - Hypokalemia and Hyperkalemia management - Compatibility of IV mixtures with different diluents and their stability	Week 1-2	72 hours	a 1, a2, b1, c1, c2, d1, d2
Number of Weeks /and Units Per Semester: 2 weeks			72 hours	

V. Teaching Strategies of the Course:

- Clinical cases studies
- Small practical session and discussion
- Seminars
- Critical analysis and reading
- Use of advanced database search
- Individual supervision
- Collecting, interpreting, and integrating available information in disease state
- Self-learning

VI. Assessment Methods of the Course:

- Assignments
- Oral case discussions during clinical rounds
- Pharmacy practice manual

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- Formal case presentation
- Seminar
- Exam

VII. Assignments:

No.	Assignments	Aligned CILOs (symbols)	Week Due	Mark
1	Assignment 1: Develop a pharmaceutical care plan for selected case in intensive care unit according to appropriate primary literature and updated guidelines (individual).	a 1, a2, b1, c1, c2, d1, d2	Week 1	10
2	Assignment 2: Develop a pharmaceutical care plan for intensive care patients based on updated guidelines (Group).	a 1, a2, b1, c1, c2, d1, d2	Week 2	10
Total				20

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	Course Training Period	20	20 %	a 1, a2, b1, c1, c2, d1, d2
2	Adherence to Professional Attitudes	Course Training Period	10	10 %	d1, d2
3	Skills Acquired during Training	Course Training Period	20	20 %	b1, c1, c2, d1, d2
4	Formal Case Presentation	Last week of Rotation	10	10 %	a 1, a2, b1, c1, c2, d1, d2
5	General Written Examination	Last week of Rotation	40	40 %	a 1, a2, b1, c1, c2, d2
Total			100	100%	

IX. Learning Resources:

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
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- Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).

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

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

2- Essential References.

- DiPiro et al, 2020, Pharmacotherapy: A Pathophysiological Approach, 11th edition.
- Caroline S. Zeind and Michael G. Carvalho, 2018, Applied Therapeutics: The Clinical Use of Drugs edition.
- 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

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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.

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I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:	Dr. Ali Alyahawi	Office Hours
Location & Telephone No.:	775957401	2 hour weekly
E-mail:	alyahawipharm@yahoo.com	SAT SUN MON TUE WED THU

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IV. Course Intended Learning Outcomes (CILOs) :

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

V. Course Contents:

A. Theoretical Aspect:

B. Case Studies and Practical Aspect:

VI. Teaching Strategies of the Course:

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— Exam

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Total			

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