

Republic of Yemen

Ministry of Higher Education & Scientific Research

21 September University of Medicals & Applied Sciences



Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Specification of **Clerkship-I**

Course No. (02.01.221)

2016/2017

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Ali Alyahawi	Dr. Hassan Al-Mahbashi	Dr. <i>Hassan Al-Mahbashi</i>	Dr. Abdueilah Thabet	Dr. Ali Alyahawi



I. Course Identification and General Information:

1	Course Title:	Clerkship-I			
2	Course Code & Number:	02.01.221			
3	Credit Hours:	Credit Hours	Theory Hours		Training Hours
			Lecture	Exercise	
		5	--	--	252 hrs.
4	Study Level/ Semester at which this Course is offered:	Level 5 / Semester 1			
5	Pre –Requisite (if any):	Therapeutics- III			
6	Co –Requisite (if any):	Therapeutics- IV			
7	Program (s) in which the Course is Offered:	Bachelor 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:	21 September University			
12	Prepared by:	Dr. Ali Al-Yahawi			
13	Date of Approval:	2017			

II. Course Description:

The clinical training-1 course is designed to integrate the student skills and knowledge of pharmacology, therapeutic and clinical courses in practice real cases to identify and resolve different treatment related problems. Students will participate in medical ward rounds, case seminars & hospital education programs. Available rotations include: Cardiology, Infectious Diseases, Surgery, Endocrine, Respiratory, Nephrology, and GIT. Students will be involved in clinical research & assignments, as well as in patient monitoring.

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:		
a 1	Describe the etiology, pathophysiology, treatment (drug and non-drug), and prevention for selected hospital cases.	A1, A3, A4
a 2	Define the clinical pharmacist services in identifying and resolving different treatment related problems for selected hospital cases.	A5, A7
B. Intellectual Skills:		
b 1	Collect and integrate the essential and accurate information about patients and their conditions	B2,B3
b 2	Identify specific drug-related problems and prioritize responsibilities to provide the patient care	B5
b 3	Construct appropriate pharmacotherapy treatment and monitoring plans for selected hospital cases.	B6
C. Professional and Practical Skills:		
c1	Implement evidence based, patient-centered pharmaceutical care as an integral part of an interdisciplinary team and optimize the outcomes of patients of selected hospital cases.	C2, C3, C5
c2	Provide the patients and the healthcare team with updated sources of information regarding the optimal use, expected outcomes, and adverse effects of drug therapy regimens.	C6
D. Transferable Skills:		
d1	Share successfully in team-work and improve student skills of patients interview.	D1
d2	Search efficiently in the medical journal databases by browsing the internet professional sites for Evidence-Based Medicine (EBM)	D2, 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- Describe the etiology, pathophysiology, treatment (drug and non-drug), and prevention for selected hospital cases.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
a2. Define the clinical pharmacist services in identifying and resolving different treatment related problems for selected hospital cases.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - 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
b1- Collect and integrate the essential and accurate information about patients and their conditions	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
b2. Identify specific drug-related problems and prioritize	<ul style="list-style-type: none"> - Clinical cases studies 	<ul style="list-style-type: none"> - Clinical cases studies

responsibilities to provide the patient care	<ul style="list-style-type: none"> - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning
b3. Construct appropriate pharmacotherapy treatment and monitoring plans for selected hospital cases.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning

(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- Implement evidence based, patient-centered pharmaceutical care as an integral part of an interdisciplinary team and optimize the outcomes of selected hospital cases.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
C2- Provide the patients and the healthcare team with updated sources of information regarding the optimal use, expected outcomes, and adverse effects of drug therapy regimens.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam

(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 in team-work and improve student skills of patients interview.	<ul style="list-style-type: none"> - Small practical session and discussion - Seminars 	<ul style="list-style-type: none"> - Oral case discussions during clinical rounds - Formal case presentation - Presentation for one of the course content topics.
d2- Search the medical journal databases by browsing the internet professional sites for Evidence-Based Medicine (EBM)	<ul style="list-style-type: none"> - Use of advanced database search - Self-learning 	<ul style="list-style-type: none"> - Assignments - 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 (CLOs)
1	NA	-			
2		-			
3		-			
12					
Number of Weeks /and Units Per Semester					

B. Case Studies and Practical Aspect:				
Order	Unit/ Topics List	Number of Weeks	contact hours	Learning Outcomes
1	Cardiology	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
2	Infectious Diseases & Surgery	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
3	Endocrine	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
4	Respiratory	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
5	Nephrology	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
6	GIT	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
7	Final Exam	Week 13	The Last week of Course Training	a 1, a2, b1, b2, b3, c1, c2, d1, d2
Number of Weeks /and Units Per Semester: 13 weeks			252	

C. Tutorial Aspect: (ان وجدت)

No.	Tutorial	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1				
2	1-			

V. Teaching Strategies of the Course:

- Clinical cases studies
- Small practical session and discussion
- Seminars
- Manuals
- 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
- Formal case presentation
- Exam

VII. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	Assignment 1: Develop a pharmaceutical care plan for selected case in CVD according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, b3, c1, c2, d1, d2	Week 3	5
2	Assignment 2: Develop a pharmaceutical care plan for selected case of DM according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, b3, c1, c2, d1, d2	Wee 6	5
3	Assignment 1: Develop a pharmaceutical care plan for selected case of CKD according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, b3, c1, c2, d1, d2	Week 9	5
4	Assignment 2: Develop a pharmaceutical care plan for selected case in GIT according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, b3, c1, c2, d1, d2	Wee 12	5
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, a 2, b1, b2, b3, 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, b2, b3, c1, c2, d1,
4	Formal Case Presentation	Last Week of Each Rotation	10	10 %	a 1, a2, b1, b2, b3, c1, c2, d2
5	General Written Examination	Last Week of Each Rotation	40	40 %	a1, a2, b1, b2, b3, c1, c2, d2
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. 5rd edition.
2. Katzung, 2018, Basic & Clinical Pharmacology. 14th edition.

2- Essential References.

1. DiPiro et al, 2020, Pharmacotherapy: A Pathophysiological Approach, 11th 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.

21 September University for Medicals & Applied Sciences

Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Specification of **Clerkship-I**

Course No. (02.01.221)

2016/2017

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. 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:	Clerkship-I			
2	Course Code & Number:	02.01.221			
3	Credit Hours:	Credit Hours	Theory Hours		Training Hours
			Lecture	Exercise	
		5	--	--	252 hrs.
4	Study Level/ Semester at which this Course is offered:	Level 5 / Semester 1			
5	Pre -Requisite (if any):	Therapeutics- III			
6	Co -Requisite (if any):	Therapeutics- IV			
7	Program (s) in which the Course is Offered:	Bachelor 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:	21 September University			
12	Prepared by:	Dr. Ali Al-Yahawi			
13	Date of Approval:	2017			

III. Course Description:

The clinical training-I course is designed to integrate the student skills and knowledge of pharmacology, therapeutic and clinical courses in practice real cases to identify and resolve different treatment related problems. Students will participate in medical ward rounds, case seminars & hospital education programs. Available rotations include: Cardiology, Infectious Diseases, Surgery, Endocrine, Respiratory, Nephrology, and GIT. Students will be involved in clinical research & assignments, as well as in patient monitoring.

IV. Course Intended Learning Outcomes (CILOs) :

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

A. Knowledge and Understanding:		
a 1	Describe the etiology, pathophysiology, treatment (drug and non-drug), and prevention for selected hospital cases.	A1, A3, A4
a 2	Define the clinical pharmacist services in identifying and resolving different treatment related problems for selected hospital cases.	A5, A7
B. Intellectual Skills:		
b 1	Collect and integrate the essential and accurate information about patients and their conditions	B2,B3
b 2	Identify specific drug-related problems and prioritize responsibilities to provide the patient care	B5
b 3	Construct appropriate pharmacotherapy treatment and monitoring plans for selected hospital cases.	B6
C. Professional and Practical Skills:		
c1	Implement evidence based, patient-centered pharmaceutical care as an integral part of an interdisciplinary team and optimize the outcomes of patients of selected hospital cases.	C2, C3, C5
c2	Provide the patients and the healthcare team with updated sources of information regarding the optimal use, expected outcomes, and adverse effects of drug therapy regimens.	C6
D. Transferable Skills:		
d1	Share successfully in team-work and improve student skills of patients interview.	D1
d2	Search efficiently in the medical journal databases by browsing the internet professional sites for Evidence-Based Medicine (EBM)	D2, D3

V. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
1	NA	-		
2		-		
3		-		
12				
Number of Weeks /and Units Per Semester				

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
1	NA	-		
2		-		
3		-		
12				
Number of Weeks /and Units Per Semester				

No.	Tutorial	Number of Weeks	Contact Hours
1			
2	2-		

B. Case Studies and Practical Aspect:				
Order	Unit/ Topics List	Number of Weeks	contact hours	Learning Outcomes
1	Cardiology	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
2	Infectious Diseases & Surgery	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
3	Endocrine	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
4	Respiratory	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
5	Nephrology	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
6	GIT	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, a2, b1, b2, b3, c1, c2, d1, d2
7	Final Exam	Week 13	The Last week of Course Training	a 1, a2, b1, b2, b3, c1, c2, d1, d2
Number of Weeks /and Units Per Semester: 13 weeks			252	

VI. Teaching Strategies of the Course:

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

VII. Assessment Methods of the Course:

- Assignments
- Oral case discussions during clinical rounds
- Pharmacy practice manual
- Formal case presentation
- Exam

VII. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	Assignment 1: Develop a pharmaceutical care plan for selected case in CVD according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, b3, c1, c2, d1, d2	Week 3	5
2	Assignment 2: Develop a pharmaceutical care plan for selected case of DM according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, b3, c1, c2, d1, d2	Wee 6	5
3	Assignment 1: Develop a pharmaceutical care plan for selected case of CKD according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, b3, c1, c2, d1, d2	Week 9	5
4	Assignment 2: Develop a pharmaceutical care plan for selected case in GIT according to appropriate primary literature and updated guidelines.	a 1, a2, b1, b2, b3, c1, c2, d1, d2	Wee 12	5
Total				20

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

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
1	Assignments	Course Training Period	20	20 %
2	Adherence to Professional Attitudes	Course Training Period	10	10 %
3	Skills Acquired during Training	Course Training Period	20	20 %
4	Formal Case Presentation	Last Week of Each Rotation	10	10 %
5	General Written Examination	Last Week of Each Rotation	40	40 %
Total			100	100%

- 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. 5rd edition.
2. Katzung, 2018, Basic & Clinical Pharmacology. 14th edition.

2- Essential References.

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

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

	Class Attendance:
1	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.
	Tardiness:
2	A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
	Exam Attendance/Punctuality:
3	



	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.

Republic of Yemen

Ministry of Higher Education & Scientific Research

21 September University of Medicals & Applied Sciences




Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm D

Course Specification of **Clerkship -II**

Course No. (02.01.225)

2016/2017

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



I. Course Identification and General Information:

1	Course Title:	Clerkship -II			
2	Course Code & Number:	02.01.225			
3	Credit Hours:	Credit Hours	Theory Hours		Lab/Train ing Hours
			Lecture	Exercise	
		5	--	--	252
4	Study Level/ Semester at which this Course is offered:	Level 5 – Semester 2			
5	Pre –Requisite (if any):	Clinical Training -I			
6	Co –Requisite (if any):	Therapeutics-IV			
7	Program (s) in which the Course is Offered:	Bachelor 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:	21 September University			
12	Prepared by:	Dr. Ali Alyahawi			
13	Date of Approval:				

II. Course Description:

This clinical training-II course aims to integrate the students skills and knowledge of pharmacology, therapeutic and clinical courses in dealing with hospital real cases to identify and resolve different treatment related problems of different sub-specialties practiced over the rotation. Students will participate in medical ward rounds, case seminars & hospital education programs. Available rotations include: critical care, psychiatric/neurology, oncology/hematology, pediatrics, gynecology/obstetrics, and ambulatory care.

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	Define the role and responsibilities of a clinical pharmacist in identification and resolving different treatment related problems of selected cases during hospital training.	A1, A3, A4, A5, A7
B. Intellectual Skills:		
b1	Identify treatment-related problems through selected cases discussion during hospital training.	B2, B3
b2	Design the appropriate pharmacotherapy treatment and monitoring plan for selected hospital cases.	B5, B6
C. Professional and Practical Skills:		
c1	Apply the optimal pharmacotherapy regimen and monitoring parameters for selected hospital cases.	C2, C3, C5, C6C2
D. Transferable Skills:		
d1	Search in the medical journal databases by browsing professional medical sites for Evidence-Based Medicine (EBM)	D3
d2	Communicate effectively with healthcare team and improve student skills of patient counseling.	D1, 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
a1- Understand the role and responsibilities of a clinical pharmacist in identification and resolving different treatment related problems of respiratory, rheumatology, endocrine, infectious diseases, surgery, pediatrics, gynecology/obstetrics.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - 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
b1- Identify drug-related problems through selected cases discussion of respiratory, rheumatology, endocrine, infectious diseases, surgery, pediatrics, gynecology/obstetrics.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
b2- Design the appropriate pharmacotherapy treatment and monitoring plan through selected case discussion of respiratory, rheumatology, endocrine, infectious diseases, surgery, pediatrics, gynecology/obstetrics.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam

© 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 the optimal pharmacotherapy regimen and monitoring parameters for selected cases of respiratory, rheumatology, endocrine, infectious diseases, surgery, pediatrics, gynecology/obstetrics.	<ul style="list-style-type: none"> - Clinical cases studies - Small practical session and discussion - Seminars - Manuals - Use of advanced database search - Individual supervision - Self-learning 	<ul style="list-style-type: none"> - Assignments - Oral case discussions during clinical rounds - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam

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

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1-Improve student skills of data collection and interpretation from professional medical sites.	<ul style="list-style-type: none"> - Use of advanced database search - Self-learning 	<ul style="list-style-type: none"> - Assignments - Formal case presentation - Presentation for one of the course content topics. - Exam
d2- Communicate effectively with healthcare team and improve student skills of patient counseling.	<ul style="list-style-type: none"> - Small practical session and discussion - Seminars 	<ul style="list-style-type: none"> - Oral case discussions during clinical rounds - Formal case presentation - Presentation for one of the course content topics.

IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	NA	- ...			
16	Final Theoretical Exam				
Number of Weeks /and Units Per Semester					

B. Case Studies and Practical Aspect:

Order	Units/Topics List	Number of Weeks	Contact Hours	Learning Outcomes
1	Critical care	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, b1, b2, c1, d1, d2
2	Psychiatric/Neurology	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, b1, b2, c1, d1, d2
3	Oncology/hematology	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, b1, b2, c1, d1, d2
4	Pediatrics	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, b1, b2, c1, d1, d2

			presentation at the end of the rotation)	
5	Gynecology/Obstetrics.	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, b1, b2, c1, d1, d2
6	Ambulatory Care	Two Weeks	42 hrs. (36 hrs. on-site a ward rotation + 6 hrs. a formal case presentation at the end of the rotation)	a 1, b1, b2, c1, d1, d2
7	Final Exam	Week 13	The Last week of Course Training	a 1, b1, b2, c1, d1
Number of Weeks /and Units Per Semester: 13 Weeks			252 hours	

C. Tutorial Aspect: (ان وجدت)

No.	Tutorial	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	NA			
2				
Number of Weeks /and Units Per Semester				

V. Teaching Strategies of the Course:

- Clinical cases studies
- Small practical session and discussion
- Seminars
- Manuals
- 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
- Formal case presentation
- Exam

VII. Assignments:				
No	Assignments	Aligned CIOs(symbols)	Week Due	Mark
1	Assignment 1: Develop a pharmaceutical care plan for selected case in critical care according to appropriate primary literature and updated guidelines.	a1, b1, b2, c1, d1, d2	Week 3	5
2	Assignment 2: Develop a pharmaceutical care plan of selected case in oncology care support according to appropriate primary literature and updated guidelines.	a1, b1, b2, c1, d1, d2	Week 6	5
3	Assignment 3: Develop a pharmaceutical care plan for selected case of pediatric according to appropriate primary literature and updated guidelines.	a1, b1, b2, c1, d1, d2	Week 9	5
4	Assignment 4: Develop a pharmaceutical care plan for selected case of gynecology disease according to appropriate primary literature and updated guidelines.	a1, b1, b2, c1, d1, d2	Week 12	5
Total				20

VIII. Schedule of Assessment Tasks for Students During the Semester:					
No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned CIOs
1	Assignments	Course Training Period	20	20 %	a1, b1, b2, c1, d1, d2
2	Adherence to Professional Attitudes	Course Training Period	10	10 %	d1, d2
3	Skills Acquired during Training	Course Training Period	20	20 %	a1, b1, b2, c1, d1, d2
4	Formal Case Presentation	Last Week of training course	10	10 %	a1, b1, b2, c1, d1, d2
5	General Written Examination	Last Week of training course	40	40 %	a1, b1, b2, c1, d1, d2
Total			100	100%	

IX. Learning Resources:	
1- Required Textbook(s) (maximum two).	
	1. Chisholm-Burns et al, 2019 , Pharmacotherapy principles & practice. 5rd edition. 2. Katzung, 2018, Basic & Clinical Pharmacology. 14th edition.
2- Essential References.	
	1. DiPiro et al, 2020, Pharmacotherapy: A Pathophysiological Approach, 11th 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.

21 September University for Medicals & Applied

Sciences **Faculty of Clinical Pharmacy**

Bachelor of Clinical Pharmacy & Pharm D

Course Specification of **Clerkship -II**

Course No. (02.01.225)

2016/2017

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. 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:	Clerkship -II					
2	Course Code & Number:	02.01.225					
3	Credit Hours:	Credit Hours	Theory Hours		Lab/Training Hours		
			Lecture	Exercise			
		5	--	--	252		
4	Study Level/ Semester at which this Course is offered:	Level 5 – Semester 2					
5	Pre –Requisite (if any):	Clinical Training -I					
6	Co –Requisite (if any):	Therapeutics-IV					
7	Program (s) in which the Course is Offered:	Bachelor 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:	21 September University					
12	Prepared by:	Dr. Ali Alyahawi					
13	Date of Approval:						

III. Course Description:

This clinical training-II course aims to integrate the students skills and knowledge of pharmacology, therapeutic and clinical courses in dealing with hospital real cases to identify and resolve different treatment related problems of different sub-specialties practiced over the rotation. Students will participate in medical ward rounds, case seminars & hospital education programs. Available rotations include: critical care, psychiatric/neurology, oncology/hematology, pediatrics, gynecology/obstetrics, and ambulatory care.

IV. Course Intended Learning Outcomes (CILOs) :

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

A. Knowledge and Understanding:

a1	Define the role and responsibilities of a clinical pharmacist in identification and resolving different treatment related problems of selected cases during hospital training.	A1, A3, A4, A5, A7
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B. Intellectual Skills:

b1	Identify treatment-related problems through selected cases discussion during hospital training.	B2,B3
b2	Design the appropriate pharmacotherapy treatment and monitoring plan for selected hospital cases.	B5, B6

C. Professional and Practical Skills:

c1	Apply the optimal pharmacotherapy regimen and monitoring parameters for selected hospital cases.	C2,C3, C5, C6C2
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D. Transferable Skills:

d1	Search in the medical journal databases by browsing professional medical sites for Evidence-Based Medicine (EBM)	D3
d2	Communicate effectively with healthcare team and improve student skills of patient counseling.	D1, D2

V. Course Contents:				
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16	Final Theoretical Exam			
Number of Weeks /and Units Per Semester				

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