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. Jacob	Dr. Abdulelah Thabet	br. Ali Alyahawi
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Department of Unite of Development & Quality assurance



I. Course Identification and General Information:

1	Course Title:	Clerkship-I				
2	Course Code & Number:	02.01.221				
		Credit Theory Hours		Training		
3	Credit Hours:	Hours	Lecture	Exercise	Hours	
		5	. 7.7	77	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-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.



و زارة التطيم العالي والبحث العلمي وزارة التطيم العالي والبحث العلمي والمعسة 21 مستمبر للعلوم الطبية والتطبيقية كلية الصيدلة المسريرية

قسم وحدة التطوير وضمان الجودة

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

Referenced PILOs

be a	able to:	Learning out of program
A. K	nowledge and Understanding:	100
a l	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.	1
B. Ir	itellectual 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
ь 3	Construct appropriate pharmacotherapy treatment and monitoring plans for selected hospital cases.	В6
C. P	rofessional and Practical Skills:	
cl	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. T	ransferable Skills:	
dl	Share successfully in team-work and improve student skills of patients interview.	DI
d2	Search efficiently in the medical journal databases by browsing the internet professional sites for Evidence-Based Medicine (EBM)	D2, D3

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والمنافئ والمنتان والمنتان

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the course content

topics. Exam

(a) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies: Course Intended Learning Teaching strategies Assessment Strategies Outcomes Assignments Clinical cases studies Oral case discussions Small practical session during clinical rounds and discussion Pharmacy practice a1-Describe the etiology, Seminars manual pathophysiology, treatment (drug and Manuals Formal non-drug), and prevention for case selected hospital cases. Use of advanced database presentation search Presentation for one of Individual supervision the course content Self-learning topics. Exam Assignments Clinical cases studies Oral case discussions Small practical session during clinical rounds and discussion Pharmacy practice a2. Define the clinical pharmacist Seminars manual services in identifying and resolving Manuals Formal case different treatment related problems Use of advanced database presentation for selected hospital cases. Presentation for one of

Individual supervision

Self-learning

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1- Collect and integrate the essential and accurate information about patients and their conditions	 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 contentopics. Exam
b2. Identify specific drug-related problems and prioritize	- Clinical cases studies	- Clinical cases studies

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responsibilities to provide the patient care	 Small practical session and discussion Seminars Manuals Use of advanced database search Individual supervision Self-learning 	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.	 Clinical cases studies Small practical session and discussion Seminars Manuals Use of advanced database search Individual supervision Self-learning 	 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

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.	- 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- 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.	 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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والفرف وكالمنسية

وزارة التعليم العالي والبحث العلمي جامعـــة 21 سبتمبر للعلوم الطبية والتطبيقية كلية الصيدلة السريرية

> قسم وحدة التطوير وضعان الجودة

(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.	discussion	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)	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:

14 14			
34			
=			
	eeks /and Units Per Semester	eeks /and Units Per Semester	eeks /and Units Per Semester

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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
Num	ber of Weeks /and Units Per weeks	Semester: 13	252	

C. Tutorial Aspect: (ان وجدت)

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

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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

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.		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

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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	TEST FURNIS	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.
- 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

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	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.
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

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Department of
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I. Information abou	t Faculty Member Resp	onsi	ble	for t	he C	our	se:
Name of Faculty Member:	Dr. Ali Alyahawi			Office	Hour	s	
Location& Telephone No.:	775957401						
E-mail:	alyahawipharm@yahoo.com	SAT	SLN	MON	TUE	WED	THU

II. Course Identification and General Information:

1	Course Title:	Clerkshi	Clerkship-I				
2	Course Code & Number:	02.01.221					
					Training		
3	Credit Hours:				Hours		
		5 252					
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:	Semeste	r based Sy	stem			
10	Mode of Delivery:	Full Tim	ie				
11	Location of Teaching the Course:	21 September University					
12	Prepared by:	Dr. Ali	Al-Yahawi				
13	Date of Approval:	2017					



وحدة التطوير وضمان الجودة

III. 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.

IV. Course Intended Learning Outcomes (CILOs):

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

	nowledge 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. In	tellectual Skills:	
ь 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
ь3	Construct appropriate pharmacotherapy treatment and monitoring plans for selected hospital cases.	В6
C. P	rofessional and Practical Skills:	
cl	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. T	ransferable Skills:	
d1	Share successfully in team-work and improve student skills of patients interview.	DI
d2	Search efficiently in the medical journal databases by browsing the internet professional sites for Evidence-Based Medicine (EBM)	D2, D3



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قسم وحدة التطوير وضمان الجودة

V	. Course Contents:	
A.	Theoretical Aspect:	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Hours Hours
1	NA	=		
2		m		
3		~		
12				

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
1	NA	æ		
2		ica:		
3		F		
12				

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

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	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

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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

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



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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.
 - 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)

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.
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:

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	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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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 Alyahayo	Dr. Hassen Al Mahbashi	DrHuma	Dr. Abdulelah Thabet	Dr. Ali algertawa
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				الطبية والتاعية



1	Course Title:	Clerkship -II			
2	Course Code & Number:	02.01.225			
	Credit Hours:	Credit Theory Hours			Lab/Train
3		Hours	Lecture	Exercise	ing Hour
		5	5748		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			narmacy
8	Language of Teaching the Course:	English			
9	Study System:	Semeste	er based Sy	stem	
10	Mode of Delivery:	Full Tin	ne		
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.

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وزارة التعليم العالي والبحث العلمي ــة 21 سيتمير للطوم الطبية والتط كلية الصيدلة السريرية

قسم...... وحدة التطوير وضمان الجودة

	Course Intended Learning Outcomes (CILOs) n successful completion of the course, students will be able	Referenced PILOs Learning out of program	
A. K	nowledge and Understanding:		
al	Define the role and responsibilities of a clinical pharmacist in identification and resolving different treatment related problems of selected cases during hospital training.	1	
B, In	tellectual Skills:		
ы	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. P	rofessional and Practical Skills:		
cl	Apply the optimal pharmacotherapy regimen and monitoring parameters for selected hospital cases.	C2,C3, C5, C6C2	
D. T	ransferable Skills:		
dl	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	

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.	- Seminars - Manuals	Assignments Oral case discussions during clinical rounds Pharmacy practice manual Formal case presentation Presentation for one of the course contentopics. Exam	

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> قسم وحدة التطوير وضمان الجودة

(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.	 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		
b2- Design the appropriate pharmacotherapy treatment and monitoring plan through selected case discussion of respiratory, rheumatology, endocrine, infectious diseases, surgery, pediatrics, gynecology/obstetrics.	 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		

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.	- Manuals	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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قسم..... وحدة النطوير وضمان الجودة

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1-Improve student skills of data collection and interpretation from professional medical sites.	Use of advanced database search Self-learning	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.	- Small practical session and discussion - Seminars	 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				

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)		
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	a 1, b1, b2, c1, d1, d2	

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تغضين تدنيست

وزارة التعليم العالي والبحث العلمي جامعـــة 21 مبتمبر للعلوم الطبية والتطبيقية كلية الصيدلة السريرية

> قسم وحدة التطوير وضمان الجودة

Numb	er of Weeks /and Units Per	Semester:	252 hours	
7	Final Exam	Week 13	The Last week of Course Training	a 1, b1, b2 c1, d1
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)	
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
			presentation at the end of the rotation)	

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

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

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والمحورك والمحتفي والبحث الطمي والبحث الطمي المعسة 21 سبتمبر للعلوم الطبية والتطبيقية كلية الصيدلة السريرية

ضم...... وحدة التطوير وضمان الجودة

No	Assignments	Aligned CILOs(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.	al, 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.	signment 3: Develop a pharmaceutical care plan for a1, b1, b2, ected case of pediatric according to appropriate primary		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
T	Total			20

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned CILOs
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 %	al, bl, 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.
- 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.

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- 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.

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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



وزارة التعليم العالي والبحث العلمي وزارة التعليم العالي والبحث العلمي جامعــة 21 سبتمبر للعلوم الطبية والتطبيقية كلية الصيدلة السريرية قسم...... وحدة التطوير وضمان الجودة

I. Information abou	t Faculty Member Resp	onsi	ble f	for t	he C	our	se:
Name of Faculty Member:	Dr. Alf Alyahawi	Office Hours					
Location& Telephone No.:	775957401						
E-mail:	alyahawiphama@yahoo.com	SAT	SLN	MON	TUE	WED	THU

1	Course Title:	Clerkship -II				
2	Course Code & Number:	02.01.225				
	Description of the second	Credit	Theory	Theory Hours		
3	Credit Hours:	Hours	Lecture	Exercise	ng Hours	
		5	227		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:	Bachelo	r Degree in	Clinical Pha	ırmacy	
8	Language of Teaching the Course:	English				
9	Study System:	Semeste	r based Sys	stem		
10	Mode of Delivery:	Full Tin	ie			
11	Location of Teaching the Course:	21 September University				
12	Prepared by:	Dr. Ali	Alyahawi			
13	Date of Approval:					



و رارة التعليم العالي والبحث العلمي وزارة التعليم العالي والبحث العلمي المعسد 21 سبتمبر للعلوم الطبية والتطبيقية كلية الصيدلة السريرية قسم السيديدة السريرية السريري

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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:

al	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. In	tellectual 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. Pi	rofessional and Practical Skills:	
cl	Apply the optimal pharmacotherapy regimen and monitoring parameters for selected hospital cases.	C2,C3, C5, C6C2
D, T	ransferable Skills:	
dl	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



وقره وروث من المجينة المحلم وزارة التعليم العالي والبحث العلمي المعالمة 21 مبتمبر للعلوم الطبية والتطبيقية والتطبيقية والتطبيقية الصيدلة السريرية

قسم...... وحدة التطوير وضمان الجودة

V. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact
1	NA			
16	Final Theoretical Exam			

Units/Topics List	Number of Weeks	Contact Hours	Learning Outcomes
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
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
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
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
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
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
Final Exam	Week 13	The Last week of Course Training	a 1, b1, b2 c1, d1
	Critical care Psychiatric/Neurology Oncology/hematology Pediatrics Gynecology/Obstetrics. Ambulatory Care	Psychiatric/Neurology Two Weeks Oncology/hematology Two Weeks Pediatrics Two Weeks Gynecology/Obstetrics. Two Weeks Two Weeks Two Weeks	Two Weeks Two Weeks



قسم...... وحدة التطوير وضمان الجودة

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

No	Assignments	Aligned CILOs(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.	al, 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.	al, bl, 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

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المصطورية التحليم العينية المحلورية التعليم وزارة التعليم العالي والبحث العلمي المعسدة 12 سيتمبر للعلوم الطبية والتطبيقية كلية الصيدلة المسريرية

قسم وحدة التطوير وضمان الجودة

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

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned CILOs
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	A STATE OF THE PARTY OF THE PAR	100	100%	

X. Learning Resources:

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

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

2- Essential References.

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

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.
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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.