

Republic of Yemen
Ministry of Higher Education & Scientific Research
21 September University for Medicals and Applied Sciences



Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Specification of

Pharmacology-IV

Course Code. (02.03.239)

2022



T4: This Template is Developed and Approved by CAQA-Yemen, 2023

Prepared by:
Dr. Hassan Al Mahbashi

Reviewed by:
Dr. Ali Alyahawi

Head of the Department:
Dr. ----.....

Vice Dean for Quality affairs
Dr. Abdulelah Thabet

Dean of College:
Dr. Ali Alyahawi



I. General Information:

1.	Course Title:	Pharmacology-IV			
2.	Course Code:	02.03.239			
3.	Credit Hours:	Credit Hours	Theory Contact Hours		Practical Contact Hours
			Lecture	Tutorial/Seminar	Lab
		2	2		--
4.	Level/ Semester at which this Course is offered:	4 th Level / 1 st Semester			
5.	Pre –Requisite (if any):	Pharmacology 3			
6.	Co –Requisite (if any):	-			
7.	Program (s) in which the Course is Offered:	Bachelor of Clinical Pharmacy & Pharm. D.			
8.	Language of Teaching the Course:	English			
9.	Location of Teaching the Course:	Faculty of Clinical Pharmacy			
10.	Prepared by:	Prof. Hassan Al-Mahbashi			
11.	Date and Number of Approval by Council:	20			

II. Course Description:

This course will provide the students with pharmacokinetics and pharmacodynamics basics of the drugs used for treatment of diseases that effects endocrine system.;. In addition, this course will introduce the students to Immunosuppressant, Vitamins and Antiseptics, Disinfectants and Ectoparasitic ides, agents.



Republic of Yemen
Ministry of Higher Education & Scientific Research
21 SEPTEMBER UMAS
Faculty of Faculty of Clinical Pharmacy
Department of
Unit of Development & Quality assurance

الجمهورية اليمنية
وزارة التعليم العالي والبحث العلمي
جامعة 21 سبتمبر للعلوم الطبية والتطبيقية
كلية الصيدلة السريرية
قسم
وحدة التطوير وضمان الجودة

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



III. Course Intended Learning Outcomes (CILOs) : Upon successful completion of the course, students will be able to:		Referenced PILOs	
A. Knowledge and Understanding:		I, P or M/A	
a1	Identify the pharmacokinetics and pharmacodynamics basics of the drugs used for treatment of endocrine system disorders.		A2
a2	Memorize Immunosuppressant, Vitamins, Antiseptics, and Disinfectants agents.		A5
B. Intellectual Skills:			
b1	Apply basic information of pharmacokinetics and pharmacodynamics to discover drug-interaction and solve this problem.		B4
b2	Organize report show different types of Immunosuppressant, Vitamins, Antiseptics, and Disinfectants agents , their indications and contraindications .		B5
C. Professional and Practical Skills:			
c1	Show types of endocrine system disorders and drugs used in correct those disorders.		C1
c2	Apprise pharmacokinetics and pharmacodynamics of Immunosuppressant, Vitamins, Antiseptics, and Disinfectants agents.		C4
D. Transferable Skills:			
d1	Apply IT skills to reach information about a specific medication.		D3
d2	Work effectively and ethically in team work		D1
I= Introduced, P=Practiced or M/A= Mastered/Advanced			



(A) Alignment of Course Intended Learning Outcomes (Knowledge and Understanding) to Teaching Strategies and Assessment Methods:

Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
a1 Identify the pharmacokinetics and pharmacodynamics basics of the drugs used for treatment of endocrine system disorders .	- Lecture - Instructor – student Interactive - Office hour	- Exam - Assignment - Quiz
a2 Memorize Immunosuppressant, Vitamins , Antiseptics, and Disinfectants agents .	- Lecture - Instructor – student Interactive - Office hour	- Exam - Assignment - Quiz

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

Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
b1 Apply basic information of pharmacokinetics and pharmacodynamics to discover drug-interaction and solve this problem.	- Lecture - Instructor – student Interactive - Exercises - Solving Problem Methods	- Problem-Solving Exercises. - Assignment - Quiz
b2 Organize report show different types of Immunosuppressant, Vitamins , Antiseptics, and Disinfectants agents , their indications and contraindications .	- Lecture - Instructor – student Interactive - Exercises - Solving Problem Methods	- Problem-Solving Exercises. - Assignment - Quiz

(C) Alignment of Course Intended Learning Outcomes (Professional and Practical Skills) to Teaching Strategies and Assessment Methods:

Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
c1 Show types of endocrine system disorders and drugs used in correct those disorders .	- Lecture - Instructor – student Interactive - Self-Learning	- Exam - Assignment - Quiz
c2 Apprise pharmacokinetics and pharmacodynamics of Immunosuppressant, Vitamins , Antiseptics, and Disinfectants agents	- Lecture - Instructor – student Interactive - Self-Learning	- Exam - Assignment - Quiz

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

Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
d1 Apply IT skills to reach information about a specific medication.	- Self-Learning - Seminar - Exercises	- Presentation - Assignment - Quiz
d2 Work effectively and ethically in team work	- Seminar - Instructor–student Interactive	Presentation



IV. Course Contents:

A. Theoretical Aspect:

Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours
1	Pharmacology of endocrine system	a1, a2, b1, b2, c1, c2, d1, d2	- Anterior Pituitary Hormones - The Gonadal Hormones & Inhibitors - Thyroid Hormones and Thyroid Inhibitors - Insulin, Oral Hypoglycemic Drugs - Adrenocorticosteroids & Adrenocortical Antagonists - Androgens and Drugs for Erectile Dysfunction - Estrogens, Progestins and Contraceptive - Oxytocin and Other Drugs Acting on Uterus - Drugs Affecting Calcium Balance	1 2 1 2 2 1 1 1	22
2	Mid term exam	a1, a2, b1, b2, c1, c2,	- 7 th week	1	2
3	Immunosuppressant Drugs	a1, a2, b1, b2, c1, c2, d1, d2		1	2
4	Vitamins	a1, a2, b1, b2, c1, c2, d1, d2		1	2
5	Antiseptics, Disinfectants and Ectoparasitocides	a1, a2, b1, b2, c1, c2, d1, d2	-	1	2
6	Final exam	a1, a2, b1, b2, c1, c2		1	2
Number of Weeks /and Units Per Semester				16	32



VII. Assignments:

No.	Assignments	Week Due	Mark	Aligned CILOs (symbols)
1	Assignment 1: homework	4 th	2.5	a1, a2, b1, b2, c1, c2,
2	Assignment 2: problem solve	9 th	2.5	a1, a2, b1, b2, c1, c2, d1, d2
Total				5

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	4th, 9th	5	5%	a1, a2, b1, b2, c1, c2, d1, d2
2	Quiz 1	6 th	2.5	2.5%	a1, a2, b1, b2, c1, c2
3	Midterm Exam (Theory)	Week 7	20	20%	a1, a2, b1, b2, c1, c2,
4	Quiz 2	12 th	2.5	2.5%	a1, a2, b1, b2, c1, c2
5	Final Exam (Theory)	Week 16	70	70%	a1, a2, b1, b2, c1, c2
Total			100	100%	

IX. Learning Resources:

1- Required Textbook(s):

1- Required Textbook(s) Lippincott's Illustrated Review of Pharmacology; 7th ed.; Richard A Harvey & Pamela C Champe; Lippincott's Williams & Wilkins; 2018.

2- Essential References.

Basic and clinical pharmacology; 15th edition; Bertram G. Katzung; McGraw Hill Medical Company; 2020.

3- Electronic Materials and Web Sites etc.

1. <https://pubmed.ncbi.nlm.nih.gov/>



X. Course Policies: (Based on the Uniform Students' By law (2007))

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Forgery and Impersonation: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.

Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Plan (Syllabus) of

Pharmacology-IV

Course Code. 02.03.239

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

2022- 2023



II. Course Identification and General Information:

1.	Course Title:	Pharmacology-IV			
2.	Course Code:	02.03.239			
3.	Credit Hours:	Credit Hours	Theory Contact Hours		Practical Contact Hours
			Lecture	Tutorial /Seminar	Lab
		2	2		--
4.	Level/ Semester at which this Course is offered:	4th Level / 1 st Semester			
5.	Pre –Requisite (if any):	Pharmacology 3			
6.	Co –Requisite (if any):	-			
7.	Program (s) in which the Course is Offered:	Bachelor of Clinical Pharmacy & Pharm. D.			
8.	Language of Teaching the Course:	English			
9.	Location of Teaching the Course:	Faculty of Clinical Pharmacy			
10.	Prepared by:	Prof. Hassan Al-Mahbashi			
11.	Date and Number of Approval by Council:	2022			

III. Course Description:

This course will provide the students with pharmacokinetics and pharmacodynamics basics of the drugs used for treatment of diseases that effects endocrine system. In addition, this course will introduce the students to Immunosuppressant, Vitamins and Antiseptics, Disinfectants and Ectoparasitocides, agents.

IV. Course Intended Learning Outcomes (CILOs) :

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

A. Knowledge and Understanding:

- | | |
|----|---|
| a1 | Identify the pharmacokinetics and pharmacodynamics basics of the drugs used for treatment of endocrine system disorders |
| a2 | Memorize Immunosuppressant, Vitamins, Antiseptics, and Disinfectants agents. |

B. Intellectual Skills:

- | | |
|----|---|
| b1 | Apply basic information of pharmacokinetics and pharmacodynamics to discover drug-interaction and solve this problem. |
| b2 | Organize report show different types of Immunosuppressant, Vitamins, Antiseptics, and Disinfectants agents, their indications and contraindications |

C. Professional and Practical Skills:

- | | |
|----|---|
| c1 | Show types of endocrine system disorders and drugs used in correct those disorders. |
| c2 | Apprise pharmacokinetics and pharmacodynamics of Immunosuppressant, Vitamins, Antiseptics, and Disinfectants agents |

D. Transferable Skills:

- | | |
|----|---|
| d1 | Apply IT skills to reach information about a specific medication. |
| d2 | Work effectively and ethically in team work |



V. Course Contents:

A. Theoretical Aspect:

Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours
1	Pharmacology of endocrine system	a1, a2, b1, b2, c1, c2, d1, d2	- Anterior Pituitary Hormones - The Gonadal Hormones & Inhibitors - Thyroid Hormones and Thyroid Inhibitors - Insulin, Oral Hypoglycemic Drugs - Adrenocorticosteroids & Adrenocortical Antagonists - Androgens and Drugs for Erectile Dysfunction - Estrogens, Progestins and Contraceptive - Oxytocin and Other Drugs Acting on Uterus - Drugs Affecting Calcium Balance	1 2 1 2 2 1 1 1	22
2	Mid term exam	a1, a2, b1, b2, c1, c2	- 7 th week	1	2
3	Immunosuppressant Drugs	a1, a2, b1, b2, c1, c2, d1, d2		1	2
4	Vitamins	a1, a2, b1, b2, c1, c2, d1, d2		1	2
5	Antiseptics, Disinfectants and Ectoparasitocides	a1, a2, b1, b2, c1, c2, d1, d2	-	1	2
6	Final exam	a1, a2, b1, b2, c1, c2		1	2
Number of Weeks /and Units Per Semester				16	32

خطأ! لم يتم العثور على مصدر المرجع.



VI. Teaching Strategies of the Course:

- Lecture
- Instructor – student Interactive
- Exercises
- Presentation
- Office hours
- Seminar
- Assignment
- Self-Learning

VII. Assessment Methods of the Course:

خطأ! لم يتم العثور على مصدر المرجع.

- Assignments
- Quiz
- Exam
- Oral Presentation

VIII. Assignments:

No.	Assignments	Week Due	Mark
1	Assignment 1: homework	4th	2.5
2	Assignment 2: problem solve	9th	2.5
Total			

IX. 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	4th, 9th	5	5%	a1, a2, b1, b2, c1, c2, d1, d2
2	Quiz 1	6 th	2.5	2.5%	a1, a2, b1, b2, c1, c2
3	Midterm Exam (Theory)	Week 7	20	20%	a1, a2, b1, b2, c1, c2
4	Quiz 2	12 th	2.5	2.5%	a1, a2, b1, b2, c1, c2
5	Final Exam (Theory)	Week 16	70	70%	a1, a2, b1, b2, c1, c2
Total			100	100%	

X. Learning Resources:

1- Required Textbook(s):

- 1- Required Textbook(s) Lippincott's Illustrated Review of Pharmacology; 7th ed.; Richard A Harvey & Pamela C Champe; Lippincott's Williams & Wilkins; 2018.

2- Essential References.

1. Basic and clinical pharmacology; 15th edition; Bertram G. Katzung; McGraw Hill Medical Company; 2020.

3- Electronic Materials and Web Sites etc.

1. <https://pubmed.ncbi.nlm.nih.gov>

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.
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.