Academic Program Description Form

University Name: Al-Nahrain university Faculty/Institute: Faculty of pharmacy Scientific Department: Pharmacology and toxicology department Academic or Professional Program Name: Bachelor Final Certificate Name: Bacheloria degree Academic System: semesters Description Preparation Date: 28/02/2024 File Completion Date: 15/04/2024

Signature:

Head of Department Name: fleba Majid

Date: 24/04/2024

Signature:

Scientific Associate Name: Dr. Rafel Shakeep

Date: 24/04/2024

The file is checked by: Department of Quality Assurance and University Performance Director of the Quality Assurance and University Performance Department: Date: 241041 2024 Signature:

مسامعسة التقسره Approval of the Dean Pro. Dr. Hayder B Sahib MARAIN UNIVERSI 4

Ministry of Higher Education and Scientific Research Scientific Supervision and Scientific Evaluation Apparatus Directorate of Quality Assurance and Academic Accreditation Accreditation Department



Academic Program and Course Description Guide

Introduction:

The educational program is a well–planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work. In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process

Concepts and terminology:

<u>Academic Program Description</u>: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

<u>Course Description</u>: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

<u>Program Vision</u>: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

<u>Program Mission</u>: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

<u>Program Objectives</u>: They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

Curriculum Structure: All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

<u>Teaching and learning strategies</u>: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

1. Program Vision

To establish a high efficient pharmacist for healthcare community.

2. Program Mission

To improve drugs knowledge and research skills by understand the functions of body organs, high quality pharmacology concept learning, and how overcome the toxicity of compounds in a responsible manner.

3. Program Objectives

- a. Study the types of drugs to treat disease
- b. Study the adverse effect
- c. Study the contraindication of drugs
- d. Study the pharmacokinetics and pharmacodynamics of drugs
- e. Study of drug drug interactions
- f. Study the functions of human organs

4. Program Accreditation

جاري الحصول عليه

5. Other external influences

Is there a sponsor for the program?

Program Structure Number of Credit hours Percentage Reviews*	6. Program Struc	ture			
Courses	Program Structure	Number of Courses	Credit hours	Percentage	Reviews*

	1	1	1	T
Institution				
Requirements				
College	8 (19 credits)			
Requirements				
Department	8 (19 credits)			
Requirements				
Summer Training	لايوجد			
Other				

* This can include notes whether the course is basic or optional.

7. Program De	7. Program Description						
Year/Level	Course Code	Course Name	(Credit Hours			
Third		Pharmacology I	theoretical				
Forth		Pharmacology II	theoretical	Practical			
Forth		Pharmacology III	theoretical				
Forth		General toxicology	theoretical	Practical			
Fifth		Clinical toxicology	theoretical	Practical			

8. Expected learning	8. Expected learning outcomes of the program						
Knowledge							
Learning Outcomes 1	Learning Outcomes Statement 1						
<mark>Skills</mark>							
Learning Outcomes 2	Learning Outcomes Statement 2						
Learning Outcomes 3	Learning Outcomes Statement 3						
Ethics							
Learning Outcomes 4	Learning Outcomes Statement 4						
Learning Outcomes 5	Learning Outcomes Statement 5						

9. Teaching and Learning Strategies

Cognitive goals A1. How to dispense drugs A2. Patient education about drug adverse effect
A3. How to communicate with patient and educate him
A4. How to prepare lectures and seminars
<u>The skills goals special to the program</u>.
B1. Drug use skill
B2. Blood pressure measures skill
B3.patient education skill
<u>Teaching and Learning Methods</u>
Board ,smart board and power point

10. Evaluation methods

Theoretical examination Practical examination Discussion groups Practical experiment

11. Faculty

Faculty Members

i douity monipole					
Academic Rank	Specializatior	1	Special Requirements/Skills (if applicable)	Number staff	of the teaching
	General	Special		Staff	Lecturer
Professor	Pharmacy	Pharmacology		2	ا د حیدر بهاء ا د هیثم محمود
Lecturer	Pharmacy	Pharmacology		2	م د محمد فرید م د هبة ماجد
Assistant lecturer	Pharmacy	Physiology		1	م م سارة حيدر
Trainee Pharmacist	Pharmacy	/		6	رغد رحیم غدیر عبدالستار منی حیدر رسل عبدالامیر فاطمة عدنان علا رباح

Professional Development

Mentoring new faculty members

Briefly describes the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.

Professional development of faculty members

Briefly describe the academic and professional development plan and arrangements for faculty

such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.

12. Acceptance Criterion

According to ministry of higher education and scientific research centrally admission.

13. The most important sources of information about the program

Dean committee in Iraq World health organization Books and scientific sites

14. Program Development Plan

A special advisement is done for personal development to give the student the opportunity to enroll in the pharmacist community and other scientific community event

			Р	rogram	Skills	s Outl	ine								
							Req	uired	progr	am Le	earnin	g outco	mes		
Year/Level	Course Code			Knov	vledge			Skill	S			Ethics			
	Goue	optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	
First		Medical terminology	basic	V			\checkmark					\checkmark	\checkmark		
Second		Physiology 1	basic	1											
-		Physiology 2	basic												
Third		Pharmacolo gy 1	basic				\checkmark					\checkmark	\checkmark		
Fourth		Pharmacolo gy 2	basic			1			1						
		Pharmacolo gy 3	basic			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark			
		General Toxicology	basic			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
Fifth		Clinical	basic				\checkmark					\checkmark			

	Toxicology							

• Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

1. Course Name:

Pharmacology II

2. Course Code:

3. Semester / Year:

 1^{st} Semester / Fourth

4. Description Preparation Date:

19-3-2023

5. Available Attendance Forms:

Theory

- 6. Number of Credit Hours (Total) / Number of Units (Total) 45 hours
- 7. Course administrator's name (mention all, if more than one name) Name: Email:

dr.hayder.bahaa@nahrainuniv.edu.iq dr.haitham.mahmod@nahrainuniv.edu.iq dr.mohammed.fared@nahrainuniv.edu.iq dr.heba.majed@nahrainuniv.edu.iq

8. Course Objectives	
Course Objectives	To introduce students to the general pharmacology of the central nervous system and to various drug groups used in the treatment of CNS diseases or drugs altering its function The student will be introduced to various drugs used in the management of cardiovascular diseases. Moreover, the course covers the drugs affecting the gastrointestinal and respiratory systems
9. Teaching and Learning Strategies	
Strategy Cognitive goals A1. How to dispense drugs A1. How to A2. Patient education about A3. How to communicate	It drug adverse effect with patient and educate him

	B B	he skills goals special to 31. Drug use skill 2. Blood pressure meas 3.patient education skill	ures skill l		
	1	eaching and Learning M			
10 0		Board ,smart board	and power point		
10. C	ourse S	tructure			
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
1	2	introduction to the function organization of the CNS and synaptic transmitters as a basis understanding the actions of C drugs	milloudetion to	smart board	Theoretical examination
1	2	Cover all CNS drugs that caused:-excitement and euphoria, decrease feelings of fatigue, and increase motor activity. -Though and m changes	CNS stimulants.	smart board	Theoretical examination
2	3	Cover all drugs that could cause: -reversible state of CNS depression, resulting in loss of response to and perception of external stimuli. -loss of sensation in a limited region of the body	General and Local Anesthetics	smart board	Theoretical examination
3	3	Cover all drugs that targeting depressed mood or loss of interest or pleasure in most activities	Antidepressant drugs.	smart board	Theoretical examination
4	3	cover all drugs cause sedation (with concomitant relief of anxiety) or to encourage sleep (hypnosis).	Anxiolytic and Hypnotic drugs.	smart board	Theoretical examination
5	2	Cover alldrugs are able to reduce psychotic symptoms in a wide variety of conditions, including :schizophrenia, bipolar disorder or psychotic depression,	Antipsychotic (neuroleptic) drugs.	smart board	Theoretical examination
5	3	Cover all drugs that interact with the different subtypes of opioid receptors.	Opioid analgesics and antagonists	smart board	Theoretical examination
6	3	Cover all drug targeting Alzheimer's disease (AD), PD and ischaemic brain damage (stroke).	Treatment of neurodegenerative diseases.	smart board	Theoretical examination
7	2	Cover all CNS drugs that targeting epilepsy	Antiepileptic Drugs.	smart board	Theoretical examination

7	2	Cover alldrugs that increase urine volume	Diuret	ics.	smart board	Theoretical examination		
8	2	Cover alldrugs that improve cardiac function		eatment of Failure.	smart board	Theoretical examination		
9	2	Cover alldrugs that suppress arrhythmias by a direct action on the cardiac cell membrane	Antiar drugs.	rhythmic	smart board	Theoretical examination		
10	2	Cover all drugs that either improve perfusion of the myocardium or reduce its metabolic demand, or both	Antiar	nginal Drugs.	smart board	Theoretical examination		
11	3	Cover all drugs can lower blood pressure	Antihy drugs	ypertensive	smart board	Theoretical examination		
12	3	Cover all drugs inhibit thrombosis or limit abnormal bleeding	Drugs affecting the blood.		smart board	Theoretical examination		
13	1	Cover all drugs that have lipid-lowering actions	Antihy drugs	yperlipidemic	smart board	Theoretical examination		
14	3	Cover all drugs targeting the gut		ointestinal ntiemetic	smart board	Theoretical examination		
15	3	Cover all drugs used for asthma and COPD	Drugs	acting on spiratory	smart board	Theoretical examination		
11.	Course	Evaluation						
midter	m exam	20% and Final exam 60%)					
12.	Learnin	g and Teaching Resou	rces					
Require	ed textboo	oks (curricular books, if any	/)	Lipincott Pha	rmacology, Late	st Editions		
Main re	ferences	(sources)		textbooks				
Recom	mended	books and references (sc	ientific	journ	als			
journals	s, reports)						
Electror	nic Refer	ences, Websites		World health of	organization			

	-	
13.	Course Name	
	l pharmacology II	
14.	Course Code:	
15.	Semester / Year:	
1 st semest	er / fourth	
16.	Description Preparation Date:	
19-3-202	4	
17.Ava	ilable Attendance Forms:	
Prac	etical	
18.Nun	nber of Credit Hours (Total) / Num	ber of Units (Total)
30h		
19.		(mention all, if more than one name)
	اد حيدر بهاء صا	
حمود كاظم		
مد فريد حميد	م. د مُح	
حمود	م.د هبة ماجد .	
Email: dr.	hayder.bahaa@nahrainuniv.edu	.iq
dr.haithai	n.mahmod@nahrainuniv.edu.iq	
dr.mohan	nmed.fared@nahrainuniv.edu.iq	
dr.heba.m	ajed@nahrainuniv.edu.iq	
20.	Course Objectives	
Course Obje	ctives	To teach students the practice of application of
		Pharmacological principles in animal, and to
		understand the bases for evaluation of the
		pharmacological activity of drugs and chemicals in experimental animals.
21.	Teaching and Learning Strategie	
Strategy	Cognitive	
	13	

<u>The skills goals special to the program .</u> B1. Drug use skill B2. Blood pressure measures skill B3.patient education skill <u>Teaching and Learning Methods</u> Board ,smart board and power point	 goals A1. How to dispense drugs A2. Patient education about drug adverse effect A3. How to communicate with patient and educate him A4. How to prepare lectures and seminars
	<u>The skills goals special to the program.</u> B1. Drug use skill B2. Blood pressure measures skill

22. Course Structure

Week	Hours	Required Learning	Unit or subject	Learning method	Evaluation
		<mark>Outcomes</mark>	name		method
1	2		How to write a report	Practical experiment	Practical exam
2	2		handling of animal	Practical experiment	Practical exam
3	2		Rout of administration 1	Practical experiment	Practical exam
4	2		Rout of administration 2	Practical experiment	Practical exam
5	2		Effect of para- sympathomimitics on glandular secretion	Practical experiment	Practical exam
6	2		drugs acting on the eye	Practical experiment	Practical exam
7	2		Effect of drugs on BP	Practical experiment	Practical exam
8	2		The effects of drugs and their antagonists on isolated rats ileum	Practical experiment	Practical exam
9	2		The effects of drugs and their	Practical experiment	Practical exam

				onists on ed rabbits		
			ileum			
10	2		Effect Antiep	s of pileptic's	Practical experiment	Practical exam
11	2		Gener Anest		Practical experiment	Practical exam
12	2		Opioio analge		Practical experiment	Practical exam
13	2		Evalua NSAI		Practical experiment	Practical exam
14/15		Final exam				
23. (Course	Evaluation				
Practica	al quizzes	s 5%, report5%, final pra	actical e	exam 10%		
24. I	_earning	g and Teaching Resou	rces			
Require	d textboo	ks (curricular books, if an	у)	pharmacology	manual	
Main ret	ferences	(sources)		pharmacology	manual	
Recomm	Recommended books and references (scientific		jourr	als		
journals	journals, reports)					
Electron	ic Refere	ences, Websites		World healt	h organization	

25. Course Name:	
Pharmacology III	
26. Course Code:	
27. Semester / Year:	
2 nd semester / fourth	
28. Description Preparation Date:	
19-3-2024	
29.Available Attendance Forms:	
theortical	
30.Number of Credit Hours (Total) / Number of Units (Total)	
30 hours	
31. Course administrator's name (mention all, if more than one name)	
15	

. کاظم پد حمید Email: dr.hai dr.mo	tham.mahr hammed.fa	م.د bahaa@nahrainuniv nod@nahrainuniv.ed red@nahrainuniv.ed nahrainuniv.edu.iq	lu.iq			
32.	Cours	se Objectives				
Course	Objectives		drug gro endocrin abnorma function drugs us neoplass erectile agents a	oups affecting ne systems and t alities in the end as. Moreover the sed in the manag tic diseases, bon dysfunction. Inf	course will cover t gement of e disorders, obesity lammatory mmatory drugs wil	
<mark>33.</mark>	Teacl	ning and Learning Stra		covered during t		
Strategy Cognitive goals A1. How to dispense drugs A2. Patient education about drug adverse effect A3. How to communicate with patient and educate him A4. How to prepare lectures and seminars The skills goals special to the program. B1. Drug use skill B2. Blood pressure measures skill B3.patient education skill Teaching and Learning Methods Board ,smart board and power point						
34. Co	ourse Struct			1		
	Hours	Required Learning Outcomes	Unit or	Learning method	Evaluation	

3	Cover the drugs that affect the synthesis and/or secretion of specific hormones and their actions. the central role of thhypothalamic and pituitary hormones in regulating body functions is briefly presented . In addition, drugs affecting thyroid hormone synthesis and/or secretion	Hormones of the pituitary and thyroid glands.	smart board	Theoretical examination
3	Cover the role of peptide hormones in regulating the metabolic activities of the body	Insulin and oral hypoglycemic drugs.	smart board	Theoretical examination
2	Cover the physiological effe adrenal steroids hormones Uses of of the adrenal cor hormones in replacem therapy; in the treatment a management of asthma as v as other hflammatory diseases	Adreno- corticosteroids.	smart board	Theoretical examination
2	Sex hormones produced by the gonads are necessary for conception, embryonic maturation, and development of primary and secondary sexual characteristics at puberty &used therapeutically in replacement therapy, for contraception, and in management of menopausal symptoms, Several antagonists are effect in cancer chemotherapy		smart board	Theoretical examination
3	Cover the inflammat process and uses of NSAIDs All drusd use for treatm rheumatoid arthritis and go	inflammatory	smart board	Theoretical examination
112	Cover all drugs that reduced he bone loss (occurs in elderly people of	Drugs used in osteoporosis.	smart board	Theoretical examination

		both sexes but is most pronounced in postmenopausal women				
	6	Cover all drugs used to cure cancer, control of the disease to extend survival	Cano chen	er notherapy	smart board	Theoretical examination
		and maintain the best quality of life	Cano chen	er notherapy	Theoretical examination	Theoretical examination
			Cano chen	er notherapy	Theoretical examination	Theoretical examination
	3	Cover all drugs that are either autacoids or autacoid antagonists (compounds that inhibit the synthesis of certain autacoids or that interfere h their interactions with receptors)	autao antag Hista antih	coids and coid gonists umin and istamin tonin	smart board	Theoretical examination
	2	Cover all drugs t improve sexual activ			smart board	Theoretical examination
	2	cover all drugs that have ar appetite suppressant effect or or decrease fat absorpti to treat obesity	mana	agement	smart board	Theoretical examination
35. (Course Eval	uation				
		final exam 70%				
36. I	_earning and	d Teaching Resources				
Require	d textbooks (c	urricular books, if any)		Lippencott	's pharmacology	
Main ref	ferences (sour	ces)		Text books	3	
Recomm reports.		and references (scientific jour	nals,	Articles		
Electron	ic References	, Websites		World heal	th organization	

37.	Course Name:
	Pharmacology I
38.	Course Code:
39.	Semester / Year:
2 nd semest	er / third year
40.	Description Preparation Date:
26-3-2024	4
41.Avai	lable Attendance Forms:
The	oretical
42.Num	ber of Credit Hours (Total) / Number of Units (Total)
	ours
43. than	Course administrator's name (mention all, if more one name)
بهاء صاحب	
حمود كاظم	•
مد فريد حميد	
	م د هبة ماجد
Email: dr.l	nayder.bahaa@nahrainuniv.edu.iq
dr.haithan	n.mahmod@nahrainuniv.edu.iq
dr.moham	med.fared@nahrainuniv.edu.iq
dr.heba.m	ajed@nahrainuniv.edu.iq
	_

44.	Course Objectives	
Course C	Objectives	To introduce pharmacy studer the basis of gen pharmacology.The student learn about various body sys and drugs used to affect to inboth healthy and dise situations.Moreover, the co will cover the drugs used to microbial infections
45.	Teaching and Learning	g Strategies
Strategy	$ \begin{array}{c} C \\ O \\ g \\ n \\ i \\ t \\ i \\ V \\ e \\ g \\ O \\ a \\ 1 \\ . \\ H \\ O \\ W \\ t \\ O \\ W \\ t \\ O \\ W \\ t \\ O \\ M \\ t \\ O \\ M \\ t \\ O \\ M \\ t \\ A \\ A$	about drug adverse effect
	A3. How to communit A4. How to prepare le	cate with patient and educate him

The skills goals special to the program. B1. Drug use skill B2. Blood pressure measures skill B3.patient education skill Teaching and Learning Methods Board ,smart board and power point 46. Course Structure							
Wee	Hou	Required Learning	Unit or	Learning	Evaluation		
k	rs	Outcomes	subject	method	method		
			name				
1	2	Cover the basic principle of pharmacology, nature of dru		smart board	Theoretical examinatio n		
2	3	Illustrate the actions of biological system on the drugs. The major processes involved in pharmacokinetics are absorption , distribution , elimination	Pharmacokin etics.	smart board	Theoretical examinatio n		
3	3	Define and describe the terms receptor and receptor site. Distinguish between a competitive inhibitor and an allosteric inhibitor	Drug receptor interaction and Pharmacody namics. Drugs metabolism	smart board	Theoretical examinatio n		
4	1	Covers The anatomy, neurotransmitter chemistry, receptor characteristics, and functional integration of the ANS	The autonomic nervous system (ANS).	smart board	Theoretical examinatio n		
5	4	Covers Drugs with acetylcholine-like effects (cholinomimetics). Classify these dtugs into 2 major subgroups on the basis of their mode of action (ie, whether they act directly at the acetylcholine receptor or	Cholinergic system.	smart board	Theoretical examinatio n		

		indirectly through inhibition			
		cholinesterase).			
6	4	Covers Drugs with The	Adrenergic		Theoretical
		sympathomimetics	system.	smart	examinatio
		constitute a very important			n
		group of drugs used for		board	
		cardiovascular, respiratory,			
		and other conditions			
7	2	Antimicrobial therapy	Principal of		Theoretical
		takes advantage of the	antimicrobial	smart	examinatio
		biochemical differences	therapy.		n
		that exist between		board	
		microorganisms and			
		human beings.			
		Antimicrobial drugs			
		are effective in the			
		treatment of infections			
		because of their selective			
		toxicity; that is, they have			
		the ability to injure or kill			
		an invading microorganism without			
		e			
		harming the cells of the host. In most instances, the			
		selective			
		toxicity is relative rather			
		than absolute, requiring			
		that the concentration			
		of the drug be carefully			
		controlled to attack the			
		microorganism, while still			
		being tolerated by			
		host.			
8	4	The beta-lactams include some of the	β- lactam		Theoretical
-	-	mosteffective, widely used, and well-	and other cell	smart	examinatio
		tolerated agents available for	wall		n
		the treatment of microbial infections.	synthesis	board	
		Vancomycin, fosfomycin, and bacitracin	inhibitor		
		also inhibit cell wall synthesis but are not	antibiotics		
		nearly as important as the beta-lactam			
		drugs			
9			MID EXAM		
10	3	The antimicrobial drugs reviewed in this	Protien		Theoretical
		lecture selectively	synthesis	smart	examinatio
		inhibit bacterial protein synthesis. The	inhibitors		n
		mechanisms of protein		board	
		synthesis in microorganisms are not			
		identical to those of			
		mammalian cells			

11	3	Describe how	Quinolones,		Theoretical
		sulfonamides and	Folate	smart	examinatio
		trimethoprim affect	antagonists,		n
		bacterial folic acid	and urinary	board	
		synthesis and	tract		
		how resistance to the	antiseptics.		
		antifolate drugs occurs.			
		Identify major clinical uses			
		of sulfonamides and			
		trimethoprim, singly and in			
		combination,			
		and describe their			
		characteristic			
		pharmacokinetic properties			
		and toxic effects			
		Describe how			
		fluoroquinolones inhibit			
		nucleic acid synthesis and			
		identify mechanisms			
		involved in bacterial			
		resistance to these agents.			
		List the major clinical			
		uses of fluoroquinolones			
		and describe their			
		characteristic			
		pharmacokinetic properties a			
		toxic effects.			
12	2	List 5 special problems	Antimycobac		Theoretical
		associated with	terium drugs	smart	examinatio
		chemotherapy of	C		n
		mycobacterial infections.		board	
		Identify the characteristic			
		pharmacodynamic and			
		pharmacokinetic properties			
		of isoniazid			
		and rifampin.			
		List the typical adverse			
		effects of ethambutol,			
		pyrazinamide, and			
		streptomycin.			
		Describe the standard			
		protocols for drug			
		management of latent			
		tuberculosis, pulmonary			
		tuberculosis, and			
		multidrug-resistant			
		tuberculosis.			
		Identify the drugs used in			
		leprosy and in the			
		prophylaxis and treatment			
				1	1

	M avium-intracellula			
	complex disease.			
13 2	Describe the mechanisms of action of the azole, polyene, and echinocandin antifungal drugs. Identify the clinical uses of amphotericin B, flucytosine, individual azoles, caspofungin, griseofulvin, and terbinafine. Describe the pharmacokinetics and toxicities of amphotericin B. Describe the pharmacokinetics, toxicities, and drug	Antifungal drugs.	smart board	Theoretical examinatio n
14 2	interactions of the azoles. Identify the main topical antifungal agents. Name the major	Antiprotozoa		Theoretical
	 antimalarial drugs. Know which are used for chemoprophylaxis, which are effective in chloroquine resistance, and which are exoerythrocytic schizonticides. Identify the characteristic adverse effects of the major antimalarial drugs. Describe the clinical uses and adverse effects of metronidazole. Identify the intestinal amebicides. Identify the drugs used for prophylaxis and treatment of pneumocystosis and toxoplasmosis, and know their characteristic toxic effects. Identify the major drugs used for trypanosomiasis and leishmaniasis, and know 	l drugs.	smart board	examinatio n

	characteristic to effects.			
	List the clinical uses and the adverse effects of albendazole/mebendazole, diethylcarbamazine, ivermectin, and pyrantel pamoate. Name the antihelminthic drug (or drugs) that (1) facilitate the actions of GABA, (2) increase calcium permeability in muscle, (3) activate nicotinic receptors, and (4) disrupt microtubule function. Describe clinical uses and adve effects of b praziquantel niclosamide	Anthelmintic drugs.	smart board	Theoretica examination n
•••	Course Evaluation rt 2%, quizzes 3%, mid exam 25%	% . final exam 7	′0%	
	Learning and Teaching Resou			
Requ	red textbooks (curricular books, if an	y) Lippenco	ott's pharmace	ology,
Main	references (sources)	Text boo	ks	
	nmended books and referer tific journals, reports…)	nces Articles		

49. **Course Name:**

Clinical Toxicology

Course Code: 50.

51. Semester / Year:

1st Semester / Fifth

Description Preparation Date: 52.

21-3-2024

53. Available Attendance Forms:

Theoretical and practical

54.Number of Credit Hours (Total) / Number of Units (Total)

30 hours

Course administrator's name (mention all, if more than one name) 55. Name:

م. د محمد فريد حميد م.د هبة ماجد حمود

Email:

dr.mohammed.fared@nahrainuniv.edu.iq dr.heba.majed@nahrainuniv.edu.iq

Email:

56. **Course Objectives**

Course	e Object	ives		ide students wi		1
			principl with	es and skills rea	quired to de	1
				city of chemica	ls and drug	i
				settings. It help	os students	
			correlate signs	e		
			and sym	ptoms of toxic	-	
			analytic establis	al data, and kno	ow how to	
				ive and therape	utic measur	s
			-	oning cases.		_
57	•	Teaching and Learning Strategies	S			
Strateg	у					
		Comitivo goolo				
		<u>Cognitive goals</u> A1. How to				
		lispense drugs				
		A2. Patient education about dr A3. How to communicate with		him		
		A4. How to prepare lectures an	nd seminars			
	r					
	-	The skills goals special to the prog				
		B1. Drug use skill				
]	B1. Drug use skill B1. Drug use skill B2. Blood pressure measures skill B3.patient education skill				
]	B1. Drug use skillB2. Blood pressure measures skillB3.patient education skillFeaching and Learning Methods	<u>ram .</u>			
]	B1. Drug use skillB2. Blood pressure measures skillB3.patient education skill	<u>ram .</u>			
58. C]] 	B1. Drug use skillB2. Blood pressure measures skillB3.patient education skillFeaching and Learning Methods	<u>ram .</u>			_
58. C Week]] 	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	<u>ram .</u>	ne Learning	Evaluatio	
)] Course	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	<u>ram .</u> er point	ne Learning method	Evaluatio method	_
)] Course	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	<u>ram .</u> er point	method		
Week)) Course Hours	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	ram . er point Unit or subject nam Initial Evaluation and Management	method	method	8
Week)) Course Hours	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	ram . er point Unit or subject nam Initial Evaluation and Management the Poisoned	method	method Theoretic	8
Week)) Course Hours	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	ram . er point Unit or subject nam Initial Evaluation and Management	n of smart	method Theoretic	a
Week)) Course Hours	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	ram . er point Unit or subject nam Initial Evaluation and Management the Poisoned Patient.	n of smart board	method Theoretic	2
Week)) Course Hours	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	er point Unit or subject nam Initial Evaluation and Management the Poisoned Patient. Including pediatr	n of smart board	method Theoretic	8
Week)) Course Hours	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	ram . er point Unit or subject nam Initial Evaluation and Management the Poisoned Patient.	n of smart board	method Theoretic	8
Week)) Course Hours	 B1. Drug use skill B1. Drug use skill B1. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3.patient education skill B2. Blood pressure measures skill B3. Blood pression measures skill B3. Blood pressur	er point Unit or subject nam Initial Evaluation and Management the Poisoned Patient. Including pediatr poisoning and	n of smart board	method Theoretic	2

2	1	Cover the fundamental principles of managing acute poisonings poisonings	Initial Evaluation and Management of the Poisoned Patient. Including pediatric poisoning and special consideration of geriatric patient.	smart board	Theoretic	
	1	Cover the mechanisms, manifestations of toxicity and management of OTC drugs	Drug Toxicity: Over the counter drugs, caffeine and theophylline			
3	2	inanagement of OTC drugs	Drug Toxicity: antihistamine, Decongestant; non- steroidal anti- inflammatory drugs and vitamins.	smart board	Theoretic examina	
4	2	Cover the Signs and symptoms associated with these drugs	Toxicity of Prescription Medications: Cardiovascular drugs; Digoxin ; beta blockers and ACE inhibitors	smart board	Theoretic examina	
5	2	poisoning ,also describe the cardiovascular outcomes that follow the toxicity	<pre>kicity of Prescription Medications: Cardiovascular gs : Calcium nnel blocker and Antiarrhythmic agents.</pre>	smart board	Theoretic examina	
6	2	Cover the manifestations toxicity and management anticholinergic,antidepressant antipsychotic drugs	Toxicity Prescription Medications: A cholinergic, phenothiazines; TCA	smart board	Theoretic examina	

7	2	Cover the manifestations of toxicity and management the toxicity (an illicit drug, or a licit drug used	Drug of Opioids; phencyc	Cocaine;	smart board	Theoretic examina	
8	2	outside of legitimate medical practice) cause strong feelings of euphoria or alter perception.	5	Abuse: a; Lysergic NS stimulant	smart board	Theoretic examina	
9	2	Cover: the most toxic plants that used by the human and the mech. of toxicity of the toxin included in it	Po	ic plants; bisonous shrooms.	smart board	Theoretic examina	
10	2	and management of those toxicity.		Herbal parations.	smart board	Theoretic examina	
11	2	Coverthe manifestations of toxicity and management of sedative &hypnotic drugs and anti-diabetic agents		lepressants lycemic			
12	2	Cover:- Types of chemicals and	Chemical and Environmental Toxins: Disinfectants, mphor and moth repellents		smart board	Theoretic examina	
13	2	chemicals that may cause toxicity specially in children	E T	Chemical Environmental Foxins: Tydrocarbones;	smart board	Theoretic examina	
59.	Course	e Evaluation			1	1	
	· · · · · · · · · · · · · · · · · · ·	quizzes 10%, mid exam 20%, final e	exam 60%	6			
		ng and Teaching Resources		Goldfrank's Tox Casarett and Do	0	0	
		s (sources)		Text books			
Recorr reports		books and references (scientific	journals,	Articles			
Electro	onic Refe	rences, Websites		World health	n organiza	tion	

61.	Course Name:							
General T	General Toxicology							
62.	Course Code:							
63.	Semester / Year:							
Second set	mester – Fourth year							
64.	Description Preparation Date:							
	30							

21-3-2024

65. Available Attendance Forms:

66.Number of Credit Hours (Total) / Number of Units (Total)

Name صد فرید حمید حمود Email:	م. د مد م.د هبة ماجد	e (mention all, if more than one name)
dr.moham	med.fared@nahrainuniv.edu.i	q
dr.heba.m	ajed@nahrainuniv.edu.iq	
:		
68.	Course Objectives	
Course Objec	ctives	To study the principles of exposure to diff chemicals and environmental factors and their so as well as the mechanisms of toxicity and their ri human beings. The course helps students understar required measures to protect living organisms ag suspected toxic hazards
69.	Teaching and Learning Strateg	gies
Strategy	Cognitive goals A1. How to dispense drugs A2. Patient education abou A3. How to communicate A4. How to prepare lecture The skills goals special to the p B1. Drug use skill B2. Blood pressure measures st B3.patient education skill Teaching and Learning Method Board ,smart board and p	with patient and educate him es and seminars program . kill
70 Course	e Structure	
/0. Oouist		

Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
1	2	Cover the different areas toxicology, classification toxic agents , spectrum undesired effects, a characteristic of exposure	general consideration; host factor, environmental factors of toxic effects	smart board	Theoretical examination
2	2	Cover the undesi effects of differ toxic agents on bo systems		smart board	Theoretical examination
3	2		Liver	smart board	Theoretical examination
4	2		Nervous system	smart board	Theoretical examination
5	2		Blood	smart board	Theoretical examination
6	2		Respiratory system, skin	smart board	Theoretical examination
7			MID EXAM	smart board	Theoretical examination
8	2	Cover the undesi effects of differ toxic agents on be systems	Cardiovascular system	smart board	Theoretical examination
9	2	Definition of meta chemical mechanis of metal toxicity, major toximetals.	Toxic substances: Metals	smart board	Theoretical examination
10	3		Food additive and contaminants Pesticides	smart board	Theoretical examination

11	2			Solvents,	smart board	Theoretical examination
12	2			Plants	smart board	Theoretical examination
13	2	Radiation background Types of ionizing radiation Relative biologic effectiveness and Quality factors Units of radiation activ and dose		adiation and active materials	smart board	Theoretical examination
14	2	Cover : definition of cancer, multista of carcinogenesis, mechanism of acti of carcinogen		rcinogenesis	smart board	Theoretical examination
15	2		Final	exam	smart board	Theoretical examination
71. (Course	Evaluation				
20% pi 60%fin		(10% quizzes and home	ework	, 10%final p	ractical exam), 2	0%mid exam , and
72. I	Learning	g and Teaching Resou	rces			
Require	d textboo	oks (curricular books, if an	у)	Goldfrank's To Doull Toxicolo	oxicologic Emergenc	ies, Casarett and
Main ref	ferences	(sources)		Text books		
Recomm	nended t	books and references (sci	entific	Articles		
journals	, reports.)				
Electron	ic Refere	ences, Websites		World healt	th organization	

73. Course Name:	
Physiology	
74. Course Code:	
75. Semester / Year:	
1 st semester / 2 nd year	
76. Description Preparation Da	te:
77.Available Attendance Forms:	
Theory	
78.Number of Credit Hours (Total) / N	lumber of Units (Total)
45	
79. Course administrator's nar	me (mention all, if more than one
name)	
م.م سارة حيدر خالد :Name	
Email: sara.haider@nahrainuniv.	edu.iq
80. Course Objectives	
Course Objectives	 To help students understand the basic principles of physiological functions of different tissues and organs of the human being, and how evaluate these functions and correlate them with normal and abnormal conditions. It emphasizes on role of homeostatic and hemodynamic changes in integration of physiological status

81		Teaching and Learnin	g Strategies		
Strateg	A A A A T B B B	20gnitive goals 1. How to measures to 2. How to read & und 3. How to communicate 4. How to prepare lect the skills goals special 31. Cardiac output & to 2. Blood pressure means 3. patient education skills teaching and Learning Board , smart boars	ate with patient a stures and seminant to the program respiratory rates asures skill cill <u>Methods</u>	and educate him ars measure skills	l
		Structure			
Week	Hours	Required Learning Outcomes	Unit or subject	Learning method	Evaluation method
2	3 2 1	 Understand general concept of function of body organs 1) Understand general concept of function of body organs 2) Understand the function of nerve and tissue 	General and cellular basis of medical physiology 1) General and cellular basis of medical physiology 2) Physiology of nerves and muscles	smart board smart board	Theoretical examination Theoretical examination
3	3	Understand the function of nerve and tissue	Physiology of nerves and muscles	smart board	Theoretical examination
4	3	Understand the action	Characteristic of excitable tissue	smart board	Theoretical examination

5	3	Understand transition	Synaptic		Theoretical
		o signals	transmission	smart board	examination
6	3	Understand the physiology of autonomic nervous system	The autonomic nervous system.	smart board	Theoretical examination
7	3	 Understand signal transition between nerves and muscles Understand the component and the functions of muscles and their regulations 	Neuromuscular junction Muscles: skeletal; smooth & cardiac muscles	smart board	Theoretical examination
8	3	understand pulmonary ventilation and	Respiration:	smart board	Theoretical examination
9	3	function	Respiration:	smart board	Theoretical examination
10	2	 understand pulmonary ventilation and function Understand the body fluid Compartments and the function of the kidney 	 Respiration Renal physiology 	smart board	Theoretical examination
11	3	Understand the body fluid Compartments	Renal Physiology	smart board	Theoretical examination

12	3	and the function of the	Renal		. 1 1	Theoretical		
		kidney	Physi	ology	smart board	examination		
		=						
13	1	1) Understand the	Cardi	ovascular		Theoretical		
		body fluid	syster	n	smart board	examination		
		Compartments and						
		the function of the						
		kidney						
	2	2) understand						
		physiology of heart						
		and circulatory						
		system						
14	3	understand		ovascular	smart board	Theoretical		
		physiology of heart	syster	n		examination		
15	3	and circulatory system	Cardi	ovascular		Theoretical		
			syster		smart board	examination		
83.	Course	e Evaluation			·			
	0	ne score out of 100 acco aily oral, monthly, or wr	0		0	udent such as daily		
		ng and Teaching Res						
		ooks (curricular books, if		1	Medical Physiology,	; Ganong W.F and		
			- /	Textbook o Physiology	of Medical by Guyton AC			
Main r	eference	s (sources)		Text bool				
Recorr	nmended	books and refer	ences	Articles				
(scient	ific journ	als, reports)						
Electro	Electronic References, Websites				World health organization			

85.	Course Name:
	Physiology I
86.	Course Code:
87.	Semester / Year:
1semseter	/ 2 nd year
88.	Description Preparation Date:
89.Ava	ilable Attendance Forms:
Prac	ctical
90.Nun	nber of Credit Hours (Total) / Number of Units (Total)
91.	Course administrator's name (mention all, if more than one name)
Nan	ne: م.م سارة حيدر خالد
Ema	ail: sara.haider@nahrainuniv.edu.iq
92.	Course Objectives
	38

Course Objectives				To enable students understanding the basic principles of physiological functions of different tissues and organs of the human being, and how to evaluate these functions and correlate them with the normal and abnormal conditions. It also emphasizes on the role of homeostatic and hemodynamic changes in the integration of physiological status.			
93	•	Teaching and L	.earning	g Strategies			
		A1. How to mean A2. How to deter A3. How to com A4. How to prep The skills goals s B1. respiratory n B2. Blood pressu B3. patient educa Teaching and Le Board ,sm	ct blood munica are lect special cates mea are mea ation sk arning	l group? te with patient an ures and seminat to the program . easure skills sures skill ill	nd educate him rs		
94. C	ourse	e Structure					
Week	1						
neen	Hou	rs Required Learn	ning	Unit or subject	Learning	Evaluation	
meen	Hou	rs Required Learn Outcomes	ning	Unit or subject name	Learning method	Evaluation method	
1	2	•	the	name Experiments on respiratory system (respiratory rate and volumes).	method Practical experiment	method Practical exam	
		OutcomesUnderstandrespiratory		name Experiments on respiratory system (respiratory rate and	method Practical	method	

4	2	Learning how to		od typing	Practical	Practical exam
		determine blood		blood	experiment	
		group		sfusion.		
5	2	Tutorial	Tuto	orial.	Practical	Practical exam
	_				experiment	
6	2	Learning how to		ked cell	Practical	Practical exam
		estimate packed cell	volu	me.	experiment	
7		volume	D.	• •		
7	2	Learning how to		ermination	Practical	Practical exam
		estimate	of	aalahin	experiment	
		hemoglobin concentration		oglobin centration.		
8	2	Learning how to	Bloc		Practical	Practical exam
0	2	estimate MCV,		cies.	experiment	Flactical exam
		MCHC,Color index	mue	0105.	experiment	
		& MCH				
9	2	Learning how to	Dete	ermination	Practical	Practical exam
	-	measure bleeding		leeding	experiment	
		and clotting tim		and	1	
		6	clott	ing time.		
10	2	Tutorial		orial.	Practical	Practical exam
					experiment	
11	2	Learning how to	Bloc	od	Practical	Practical exam
		measure blood	pres	sure.	experiment	
		pressure				
12	2	Understand the	Effe	ct of	Practical	Practical exam
		effect of exercise on		cise on	experiment	
		blood pressure	bloo			
13	2	(changes the blood	_	sure.		
15	2	pressure)	_	ct of	Practical	Practical exam
			bloo	cise on	experiment	
14	2	Tutorial	Tuto	sure.	Practical	Practical exam
	2	1 atoriai	Tun	/11.	experiment	I factical chain
15	2	Final exam	Fina	l exam		
95.	Cours	e Evaluation				
		the score out of 100 accor	rding	to the tacks	assigned to the	student such as dails
	-	daily oral, monthly, or wri	-		-	searche such as ually
		ing and Teaching Reso				
		books (curricular books, if a			y laboratory ma	nual
		es (sources)		Text book		
	5.51010			0 0 0 0 0		

Recommended books and references	Articles
(scientific journals, reports)	
Electronic References, Websites	World health organization

97.	Course Name:				
	Physiology II				
98.	98. Course Code:				
99.	99. Semester / Year:				
2 nd semest	2 nd semester / 2 nd year				
100.	Description Preparation Date:				
101.	Available Attendance Forms:				
Theo	oretical				
	41				

102		Number of Credit Hours (7	Total) / Number	of Units (Total)		
	45					
103	3.	Course administrator's n	ame (mention	all, if more tha	n one na	me)
		م.م سارة حيدر خالد sara.haider@nahrainuni	iv.edu.iq			
104	4.	Course Objectives				
Course Objectives				To help students understand the basic of physiological functions of different organs of the human being, and how these functions and correlate them normal and abnormal conditions. It e on the role of homeostatic and her changes in the integration of physiolog		
105	5	Teaching and Learning Str	ategies			
StrategyCognitive goals A1. How to measures the different blood cells & blood group A2. How to interpretate of endocrine hormone level? A3. How to communicate with patient and educate him A4. How to prepare lectures and seminarsThe skills goals special to the program . B1. hormone measure skills B2. Blood group measures skill B3.patient education skill Teaching and Learning Methods Board ,smart board and power point						
106.	Course	Structure				
Week	Hours	Required Learning Outcomes	Unit or subject	t name	Learning method	Evaluat method
1		3 Understand the	Basic Concepts Regulation : evo		smart	Theore

2	3	Understand	Hypothalamic Regulation of		Theore	ical
	_	the	Hormonal Functions: elation to	smart	examir	
		physiology of	the pituitary gland; relation to	1 1	••••••	
			autonomic function; thirst; other	board		
		hypothalamus	factors regulating water intake;			
		& related	control of posterior pituitary			
		hormones	secretion vasopressin &			
			oxytocin; biosynthesis,			
			intraneuronal transport, & secretion ;electrical activity of			
			magnocellular neurons;			
			vasopressin & oxytocin in other			
			locations; control of anterior			
			pituitary secretion			
3	3	Understand	The Pituitary Gland: cell types in		Theore	ical
	Ŭ	the	the anterior pituitary; growth	smart	examir	
		physiology of	hormone biosynthesis &		- Autim	ation
			chemistry; plasma levels,	board		
		pituitary	binding, & metabolism; growth			
		glands &	hormone receptors; "effects on			
		related	growth, effects on protein&			
		hormones	electrolyte homeostasis, effects			
			on carbohydrate& fat			
4	3	Undorstand	metabolism"; somatomedins Thyroid Metabolic Hormones		Theore	icol
T	3	Understand	•formation & secretion of thyroid	smart		
		the	hormones •transport &	Sinter	examir	at101
		physiology of	metabolism of thyroid hormones	board		
		thyroid	•regulation of thyroid secretion			
		hormone	•mechanism of action			
5	3	Understand	The Adrenal Medulla &		Theore	ical
		the	Adrenal Cortex •adrenal	smart	examir	
		physiology of	medulla: structure & function	1.0.5.1		
		adrenal gland	of medullary hormones	board		
			•regulation of adrenal			
			medullary secretion •adrenal			
			cortex: structure &			
			biosynthesis of adrenocortical			
			hormones •transport,			
			metabolism, & excretion of			
			adrenocortical hormones			
			•effects of adrenal androgens			
			& estrogens •physiologic			
			effects of glucocorticoids			
			•pharmacologic & pathologic			
			effects of glucocorticoids			
			•regulation of glucocorticoid			
			secretion •effects of			
			mineralocorticoids •regulation			

				1		
			of aldosterone secretion •role of mineralocorticoids in the regulation of salt balance			
6	3	Understand the hormones that affect on calcium & phosphate levels ; & bone physiology	Hormonal Control of Calcium & Phosphate Metabolism & the Physiology of Bone •calcium & phosphorus metabolism •vitamin d & the hydroxycholecalciferols •the parathyroid glands •calcitonin• effects of other hormones & humoral agents on calcium metabolism •bone physiology	smart board	Theore examir	
7	3	Understand the male reproductive system	Function of the Male Reproductive System •the male reproductive system •endocrine function of the testes •control of testicular function •testosterone and other male sex hormones	smart board	Theore	
8	3	Understand the female reproductive system	Reproductive Development & Function of the Female Reproductive System •sex differentiation & development •the female reproductive system •ovarian hormones •control of ovarian function	smart board	Theore examin	
9	3	Understand the hormonal changes during Puberty, menopause, fertilization pregnancy & lactation	Puberty, menopause, fertilization pregnancy & lactation	smart board	Theore examin	
10	3	Understand the endocrine function of pancreas	Endocrine Functions of the Pancreas & Regulation of Carbohydrate Metabolism •structure, biosynthesis, & secretion of insulin •fate of secreted insulin •mechanism of action •consequences of insulin deficiency •regulation of insulin secretion •glucagon •other islet cell hormones •hypoglycemia & diabetes	smart board	Theore	

11 3 Understand the physiology of digestion and regulation verview of gastrointestinal function and regulation gastrointestinal secretion "gastrointestinal secretion "enteric nervous system smart board Theore icc examin atic 12 3 Understand the food digestion absorption digestion absorption and mutificinal principle digestion al absorption smart board Theore icc examin atic 13 3 Understand the food digestion & absorption digestion absorption and mutificinal principle digestion and absorption smart board Theore icc examin atic 13 3 Understand the food digestion discritestinal motility general pattern of motility segment- specific pattern of motility stomach small intestine "color biload smart board Theore icc examin atic 14 3 Understand the physiology of blood composition & lymph flow veload as circulatory fluid and dynamic of blood and hymph flow veload as circulatory fluids whone marrow white blood cells platelets "red blood cells blood types plasma memostasis iymph structural feature of circulation smart board Theore icc examin atic 107. Course Evaluation 100 according to the tasks assigned to the student such as daily preparatic system memostasis iymph structural feature of irculation smart board smart board 107. Course Evaluation Review of Medical Physiology: Ganong W. Fan Textbooks of Medical Physiology is Ganong W. Fan Textbooks Text books								
12 3 Understand the function and regulation smart gastrointestinal secretion "gastrointestinal regulation "enteric nervous system smart board smart board smart the stania tion of the strointestinal regulation 12 3 Understand the food digestion & absorption digestion absorption and nucleic acid -lipids smart board smart board 13 3 Understand the GIT motility digestion for carbohydrate "protein and nucleic acid -lipids smart board smart board 14 3 Understand the GIT motility transport and metabolic function of the liver "function of the liver "builtion of blood and dynamic of blood composition & lymph flow -blood as circulatory fluid and dynamic of blood and hymph flow -blood as circulatory fluids -bone marrow -white blood composition & lymph flow -blood as circulatory fluids -bone marrow -white blood cells -platelts -red blood composition & lymph flow -blood as circulatory fluids -bone marrow -white blood cells -platelts -red blood composition & lymph flow -blood as circulatory fluids -bone marrow -white blood cells -platelts -red blood composition & lymph flow -blood as circulatory fluids -bone marrow -white blood cells -platelts -red blood composition & lymph attic - system Theore icc examin attic board 107. Course Evaluation 100 according to the tasks assigned to the student such as daily preparatic daily oral, monthly, or written exams, reports etc 108. Learning and Teaching Resources Review of Medical Physiology; Ganong W. Fan Text books Recommended books and referenc				mellitus in	humans			
12 3 Understand the food digestion & absorption digestion absorption and nutritional principle digestion and absorption of carbohydrate protein and nucleic acid +lipids smart board Theore ica examin ation board 13 3 Understand the GIT motility gastrointestinal motility *general pattern of motility *stomach *small intestine *colon smart board Theore ica examin ation board 14 3 Understand the role of liver & biliary system in GIT transport and metabolic function of the liver *function of liver *biliary system smart board Theore ica examin ation board 15 3 Understand the physiology of blood composition & lymphflow *blood as circulatory fluids *bone marrow *white blood cells *platelets red blood cells *platelets red blood cells *platelets red blood digestroin system smart board Theore ica examin ation smart board 107. Course Evaluation 100 according to the tasks assigned to the student such as daily preparation daily oral, monthly, or written exams, reports etc 108. Learning and Teaching Resources Review of Medical Physiology: Ganong W. Textbook of Medical Physiology by Guyton AC 7 an Text books Required textbooks (curricular books, if any) Review of Medical Physiology: Ganong W. Text books 7 an Text books	11	3	the physiology of GIT function	function and regulation •gastrointestinal secretion •gastrointestinal regulation •hormones and paracrine				
13 3 Understand the GIT motility gastrointestinal motility •general pattern of motility •general pattern of motility •segment-specific pattern of	12	3	the food digestion &	digestion absorption and nutritional principle •digestion and absorption of carbohydrate •protein and				
15 3 Understand the physiology of blood composition & lymphatic system blood as a circulatory fluid and dynamic of blood and lymph flow •blood as circulatory fluids •bone marrow •white blood cells •platelets •red blood cells •blood types •plasma •hemostasis •lymph •structural feature of circulation Theore ica examin ation 107. Course Evaluation •hemostasis •lymph •structural feature of circulation smart Theore ica examin ation 108. Learning and Teaching Resources Review of Medical Physiology; Ganong W. Textbooks of Medical Physiology by Guyton AC 7 an Text books Recommended books and references (scientific journals, reports) Text books Articles	13	3	the GIT	gastrointestinal motility •general pattern of motility •segment- specific pattern of motility				
and dynamic of blood and physiology of blood composition & lymphatic system and dynamic of blood and lymph flow •blood as circulatory fluids •bone marrow •white blood cells •platelets •red blood cells •blood types •plasma •hemostasis •lymph •structural feature of circulation smart board examin atter examin atter board 107. Course Evaluation •hemostasis •lymph •structural feature of circulation since of the student such as daily preparation atter to and atter board Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation daily oral, monthly, or written exams, reports etc atter to and the student such as daily preparation to and the student such as daily preparation atter to and the student such as daily preparation to an textbooks (curricular books, if any) Review of Medical Physiology; Ganong W. Textbook of Medical Physiology by Guyton AC atter to an textbooks Main references (sources) Text books Text books atter to an textbooks atter to an textbooks Recommended books and references (scientific journals, reports) Articles attices attices	14	3	role of liver & biliary system in	of the liver •function of liver				
107. Course Evaluation Distributing the score out of 100 according to the tasks assigned to the student such as daily prepared ation daily oral, monthly, or written exams, reports etc 108. Learning and Teaching Resources Required textbooks (curricular books, if any) Review of Medical Physiology; Ganong W. Textbook of Medical Physiology by Guyton AC Main references (sources) Recommended books and references (scientific journals, reports)	15	3	the physiology of blood composition & lymphatic	and dynamic of blood and lymph flow •blood as circulatory fluids •bone marrow •white blood cells •platelets •red blood cells •blood types •plasma •hemostasis •lymph •structural				
daily oral, monthly, or written exams, reports etc 108. Learning and Teaching Resources 108. Learning and Teaching Resources Required textbooks (curricular books, if any) Review of Medical Physiology; Ganong W. Tan Textbook of Medical Physiology by Guyton AC 7 an Textbooks of Medical Physiology is the second physiology. Text books Main references (sources) Text books 7 an Text books Recommended books and references (scientific journals, reports) Articles 7 an Text books	107.	Course Eva	0	1		1	1	
Required textbooks (curricular books, if any) Review of Medical Physiology; Ganong W. Textbook of Medical Physiology by Guyton AC Main references (sources) Text books Recommended books and references (scientific journals, reports) Articles		-			ssigned to the student	such as da	ily prepai	ation
Textbook of Medical Textbook of Medical Physiology by Guyton AC Main references (sources) Recommended books and references (scientific journals, reports)	108.	Learning a	nd Teaching Resources	S				
Recommended books and references (scientific journals, Articles	Required textbooks (curricular books, if any)				Textbook of Medical			⁷ and
reports)	Main re	eferences (so	urces)		Text books			
			<s (scientif<="" and="" references="" td=""><td>fic journals,</td><td>Articles</td><td></td><td></td><td></td></s>	fic journals,	Articles			
Electronic References, Websites World nearth organization		/			We ald he ald he are a			
	Electro	nic Reference	s, Websites		world health organ	ilzation		

109.	Course Name:
	Physiology II
110.	Course Code:
111.	Semester / Year:
112.	Description Preparation Date:
113.	Available Attendance Forms:
Pra	ctical
114.	Number of Credit Hours (Total) / Number of Units (Total)
115.	Course administrator's name (mention all, if more than one
nan	ne)
Nan	ne: م.م سارة حيدر خالد
Ema	ail: sara.haider@nahrainuniv.edu.iq
	46

11	6.	Course Objectives				
Course	Object	ives	principle function human b these fun normal a emphasi hemody	To enable students understanding the basic principles of physiological functions of different tissues and organs of the human being, and how to evaluate these functions and correlate them with the normal and abnormal conditions. It also emphasizes on the role of homeostatic and hemodynamic changes in the integration of physiological status.		
11	7.	Teaching and Learnin		Brear statust		
Strateg	, , , , , , , , , , , , , ,	<u>Cognitive goals</u> A1. How to measures th A2. How to measures th A3. How to communica A4. How to prepare lec <u>The skills goals special</u> B1. Renal function meas B2. Visual system meas	he differential V ate with patient tures and semir <u>to the program</u> asure skills sures skill	WBCs count & l and educate him ars	ESR?	
110	-	B3. patient education sl <u>Feaching and Learning</u> Board ,smart boa	Methods	oint		
	Cours	<u>Feaching and Learning</u> Board ,smart boa	<u>Methods</u> rd and power p			
118. Week	-	Teaching and Learning Board ,smart boa Se Structure Required Learning	<u>Methods</u> rd and power p Unit or	Learning	Evaluation	
	Cours	Teaching and Learning Board ,smart boa Se Structure Required Learning Outcomes	<u>Methods</u> rd and power p	Learning method Practical	Evaluation method Practical exam	
Week	Cours	Teaching and Learning Board ,smart boa Se Structure Required Learning	Methods rd and power p Unit or subject name Differential	Learning method	method	
Week	Cours Hours 2	Teaching and Learning Board ,smart boa Board ,smart boa Se Structure Se Required Learning Outcomes Learning how to count different types of white	Methods rd and power p Unit or subject name Differential W.B.C count Differential	Learning method Practical experiment Practical	method Practical exam	

5 7 3	2 2	Learning how to	Red blood cell counting		experiment	
	2	count platelets	Plate cour	elets nting	Practical experiment	Practical exam
3		Learning how to estimate erythrocyte sedimentation rate	Erythrocyte sedimentation rate (ESR)		Practical experiment	Practical exam
	2	Tutorial	Tutorial		Practical experiment	Practical exam
)			Mid	term exam	±	
10			Mid	term exam		
11	2	Learning how to estimate glucose level by oral glucose tolerance test	Insulin regulation of blood glucose		Practical experiment	Practical exam
12	2	Learning the function of kidneys and body hemostasis	Renal physiology		Practical experiment	Practical exam
13	2	Understand how visual system interacts with brain; how visual system detects & interprets motion / color	Some experiments on vision		Practical experiment	Practical exam
14	2	Tutorial and review	Tuto revie	orial and ew	Practical experiment	Practical exam
15	2	Final exam	Fina	al exam	Practical experiment	Practical exam
119.	Course	Evaluation				
Distrib	outing th	e score out of 100 accor aily oral, monthly, or wri	0		0	student such as dai
		ng and Teaching Reso		-		
Require	ed textbo	ooks (curricular books, if a	ny)	Practical	Physiology man	nual
Main re	eferences	s (sources)		Text boo	ks	

Recommended books and refe	erences	Articles
(scientific journals, reports)		
Electronic References, Websites		World health organization

121.	Course Name:					
	Medical termino	blogy				
122.	Course Code:					
123.	123. Semester / Year:					
1 st semest	er / 1 st year					
124.	Description Preparation Date:					
125.	Available Attendance Forms:					
The	oretical					
126.	Number of Credit Hours (Total)	/ Number of Units (Total)				
15						
127.	Course administrator's name	(mention all, if more than one name)				
Nan	م. د محمد فرید حمید :ne					
Ema	ail: dr.mohammed.fared@nahrai	nuniv.edu.iq				
128.	Course Objectives					
	•	To teach students how to pronounce, spell and le				
Course Obje	ctives	medical and pharmaceutical terms used in health				
		settings. It will use a word-building strategy that h				
		them discover connections and relationships in				
		word roots, prefixes, and suffixes. Students will le				
		meaning of each part of a complex medica.				
		pharmaceutical term, be able to put the parts together define the term.				
129.	Teaching and Learning Strategie					
Strategy	Cognitive					
	<u>Cognitive</u> goals					
	A1. How to					
	dispense drugs					
	A2. Patient education about	drug adverse effect				
	49					

A3. How to communicate with patient and educate him A4. How to prepare lectures and seminars The skills goals special to the program. B1. Drug use skill B2. Blood pressure measures skill B3.patient education skill Teaching and Learning Methods Board ,smart board and power point 130. Course Structure							
Week	Hours	ours Required Learning Unit or su		Learning	Evaluation		
1	1	Outcomes	name Basic word roots and common suffixes	method smart board	methodTheoreticalexamination		
2	1		More word roots, suffixes and prefixes related to pharmaceutical sciences (pharmacognosy, clinical pharmacy, pharmaceutics,etc)	smart board	Theoretical examination		
3	1		Basic anatomical terms and abnormal conditions	smart board	Theoretical examination		
4	1		Basic anatomical terms and abnormal conditions	smart board	Theoretical examination		
5	1		The genitals and urinary tract	smart board	Theoretical examination		
6	1		The gastrointestinal tract	smart board	Theoretical examination		
7	1		The heart and cardiovascular system	smart board	Theoretical examination		
8	1		Symptoms, diagnoses, treatments, communication qualifiers, and statistics	smart board	Theoretical examination		

9	1			oses, ents, unication ers, and	smart board	Theoretical examination
10	1			h and pment, and prientation	smart board	Theoretical examination
11	1		Gynecology, pregnancy, and childbirth		smart board	Theoretical examination
12	1		The eye and the respiratory tract		smart board	Theoretical examination
13	1		The nervous system and behavioral disorders		smart board	Theoretical examination
14	1		The nervous system and behavioral disorders		smart board	Theoretical examination
15	1		Blood and immunity		smart board	Theoretical examination
131.	Course	Evaluation			I	
30% m	id exam ,	70% final exam				
132.	Learning	g and Teaching Resou	irces			
Require	ed textboo	oks (curricular books, if an	У)	A Short Co	ourse in Medie	cal Terminolog
Main re	ferences	(sources)		Text books		
Recom	mended b	books and references (sc	ientific	books		
journals	s, reports.)				
Electror	nic Refere	ences, Websites		Medical dict	ionary	

122	Courses Norman
133.	Course Name:
134.	Course Code:
135.	Semester / Year:
136.	Description Preparation Date:
	A A
137.	Available Attendance Forms:
1011	
138.	Number of Credit Hours (Total) / Number of Units (Total)
	Number of Credit Hours (Total) / Number of Units (Total)
138.	
138. 139.	Course administrator's name (mention all, if more than one
138.	Course administrator's name (mention all, if more than one ne)
138. 139. nan	Course administrator's name (mention all, if more than one ne) ne:
138. 139. nan Nan	Course administrator's name (mention all, if more than one ne) ne:
138. 139. nan Nan	Course administrator's name (mention all, if more than one ne) ne:
138. 139. nan Nan Ema	Course administrator's name (mention all, if more than one ne: ail: Course Objectives
138. 139. nan Nan Ema 140.	Course administrator's name (mention all, if more than one ne: ail: Course Objectives

141	141. Teaching and Learning Strategies								
Strategy									
142. (Cours	se S	Structure						
Week	Hou	rs	Required Learning	Unit o	r subject	Learning	Evaluation		
			Outcomes	name		method	method		
143.0	Cours	se E	Evaluation						
	0		score out of 100 accor y oral, monthly, or wr	0	0		nt such as daily		
144. l	earn	ing	and Teaching Reso	ources					
Require	d text	booł	ks (curricular books, if a	any)					
Main ref	erenc	es (sources)						
Recomn	nende	d	books and refe	rences					
(scientifi	c jour	nals	s, reports)						
Electron	Electronic References, Websites								

145.	Course Name:							
146.	Course Code:							
147.	Semester / Year:							
148.	Description Preparation Date:							
149.	Available Attendance Forms:							
150.	Number of Credit Hours (Total) / Number of Units (Total)							
151. name Nam Emai	e:							
152.	Course Objectives							
Course Objec	tives • • •							
153.	Teaching and Learning Strategies							
Strategy								
154. Cours	se Structure							
54								

Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
155.	Course I	Evaluation			
	0		ding to the tasks assign itten exams, reports		nt such as daily
156.	Learning	and Teaching Reso	ources		
Require	d textboo	ks (curricular books, if a	any)		
Main re	ferences	(sources)			
Recomm	mended	books and refe	rences		
(scientif	ic journals	s, reports…)			
Electron	nic Refere	nces, Websites			

