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

2024

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:

Academic Program Description: 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.

Course Description: 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.

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

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

Program Objectives: 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.

Teaching and learning strategies: 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.

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: Heba Majid

Date: 24/04/2024

Signature:

Scientific Associate Name: Dr. Rafal Shakeeb

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: Dr. NoorAdil Abood

Date: 24/04/2024

Signature:

Approval of the Dean

Pro. Dr. Hayder B Sahib

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?

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*

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

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

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 outcomes of the program

Knowledge	
Learning Outcomes 1	Learning Outcomes Statement 1
Skills	
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

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

10. Evaluation methods

Theoretical examination
Practical examination
Discussion groups
Practical experiment

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor	Pharmacy	Pharmacology			2	ا د حيدر بهاء ا د هيثم محمود
Lecturer	Pharmacy	Pharmacology			2	م د محمد فريد م د هبة ماجد
Assistant lecturer	Pharmacy	Physiology			1	م م سارة حيدر
Trainee Pharmacist	Pharmacy	/			6	رغد رحيم غدير عبدالستار منى حيدر رسل عبدالامير 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

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First		Medical terminology	basic	√	√	√	√	√	√	√		√	√		
Second		Physiology 1	basic	√	√	√	√	√	√	√		√	√		
		Physiology 2	basic	√	√	√	√	√	√	√		√	√		
Third		Pharmacology 1	basic	√	√	√	√	√	√	√		√	√		
Fourth		Pharmacology 2	basic	√	√	√	√	√	√	√		√	√		
		Pharmacology 3	basic	√	√	√	√	√	√	√		√	√		
		General Toxicology	basic	√	√	√	√	√	√	√		√	√		
Fifth		Clinical	basic	√	√	√	√	√	√	√		√	√		

		Toxicology												

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

Course Description Form

1. Course Name:
Pharmacology II
2. Course Code:
3. Semester / Year:
1st 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 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

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	introduction to the functi organization of the CNS and synaptic transmitters as a basis understanding the actions of C drugs	Introduction to CNS pharmacology.	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	Diuretics.	smart board	Theoretical examination
8	2	Cover alldrugs that improve cardiac function	The treatment of heart failure.	smart board	Theoretical examination
9	2	Cover alldrugs that suppress arrhythmias by a direct action on the cardiac cell membrane	Antiarrhythmic drugs.	smart board	Theoretical examination
10	2	Cover all drugs that either improve perfusion of the myocardium or reduce its metabolic demand, or both	Antianginal Drugs.	smart board	Theoretical examination
11	3	Cover all drugs can lower blood pressure	Antihypertensive drugs	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	Antihyperlipidemic drugs	smart board	Theoretical examination
14	3	Cover all drugs targeting the gut	Gastrointestinal and antiemetic drugs.	smart board	Theoretical examination
15	3	Cover all drugs used for asthma and COPD	Drugs acting on the respiratory system.	smart board	Theoretical examination

11. Course Evaluation

midterm exam 20% and Final exam 60%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lipincott Pharmacology, Latest Editions
Main references (sources)	textbooks
Recommended books and references (scientific journals, reports…)	journals
Electronic References, Websites	World health organization

Course Description Form

13. Course Name	
Practical pharmacology II	
14. Course Code:	
15. Semester / Year:	
1st semester / fourth	
16. Description Preparation Date:	
19-3-2024	
17.Available Attendance Forms:	
Practical	
18.Number of Credit Hours (Total) / Number of Units (Total)	
30hours	
19. Course administrator's name (mention all, if more than one name)	
Name: **ا.د حيدر بهاء صاحب** **ا.د هيثم محمود كاظم** **م. د محمد فريد حميد** **م.د هبة ماجد حمود** 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**	
20. Course Objectives	
Course Objectives	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 Strategies	
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

22. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation 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

			antagonists on isolated rabbits ileum		
10	2		Effects of Antiepileptic's	Practical experiment	Practical exam
11	2		General Anesthesia	Practical experiment	Practical exam
12	2		Opioids analgesics	Practical experiment	Practical exam
13	2		Evaluation of NSAID	Practical experiment	Practical exam
14/15		Final exam			

23. Course Evaluation	
Practical quizzes 5%, report5%, final practical exam 10%	
24. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	pharmacology manual
Main references (sources)	pharmacology manual
Recommended books and references (scientific journals, reports…)	journals
Electronic References, Websites	World health organization

Course Description Form

25. Course Name:
Pharmacology III
26. Course Code:
27. Semester / Year:
2nd 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)

ا.د حيدر بهاء صاحب
ا.د هيثم محمود كاظم
م. د محمد فريد حميد
م.د هبة ماجد حمود
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

32. Course Objectives

Course Objectives	To introduce the pharmacy students to various drug groups affecting endocrine systems and their use in correcting abnormalities in the endocrine functions. Moreover the course will cover the drugs used in the management of neoplastic diseases, bone disorders, obesity and erectile dysfunction. Inflammatory agents and the anti-inflammatory drugs will also be covered during this course.

33. Teaching and Learning Strategies

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. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

	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 w as other nflammatory 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	The gonadal hormones and inhibitors.	smart board	Theoretical examination
	3	Cover the inflammat process and uses of NSAIDs All drusd use for treatm rheumatoid arthritis and g	Non-steroidal anti-inflammatory drugs (NSAIDs) and other anti-gout agents.	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 and maintain the best quality of life	Cancer chemotherapy	smart board	Theoretical examination
			Cancer chemotherapy	Theoretical examination	Theoretical examination
			Cancer chemotherapy	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)	Autacoids and autacoid antagonists Histamin and antihistamin Serotonin	smart board	Theoretical examination
	2	Cover all drugs t improve sexual activ	Drugs used erectile dysfunct	smart board	Theoretical examination
	2	cover all drugs that have ar appetite suppressant effect or or decrease fat absorpti to treat obesity	Drugs used in management obesity	smart board	Theoretical examination

35. Course Evaluation

Midterm exam 30% , final exam 70%

36. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lippencott's pharmacology
Main references (sources)	Text books
Recommended books and references (scientific journals, reports…)	Articles
Electronic References, Websites	World health organization

Course Description Form

37.	Course Name:
	Pharmacology I
38.	Course Code:
39.	Semester / Year:
2nd semester / third year	
40.	Description Preparation Date:
26-3-2024	
41.	Available Attendance Forms:
	Theoretical
42.	Number of Credit Hours (Total) / Number of Units (Total)
	45 hours
43.	Course administrator's name (mention all, if more than one name)
ا.د حيدر بهاء صاحب **ا.د هيثم محمود كاظم** **م. د محمد فريد حميد** **م.د هبة ماجد حمود** 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**	

44. Course Objectives	
Course Objectives	To introduce pharmacy student the basis of gene pharmacology.The student v learn about various body syste and drugs used to affect th inboth healthy and disea situations.Moreover, the cou will cover the drugs used to t microbial infections

45. Teaching and Learning Strategies	
Strategy	Cognitive goal A1. How to dispensed 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

46. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Cover the basic principle of pharmacology, nature of dru	Introduction to Pharmacology.	smart board	Theoretical examination
2	3	Illustrate the actions of biological system on the drugs. The major processes involved in pharmacokinetics are **absorption**, **distribution**, **elimination**	Pharmacokinetics.	smart board	Theoretical examination
3	3	Define and describe the terms receptor and receptor site. Distinguish between a competitive inhibitor and an allosteric inhibitor	Drug receptor interaction and Pharmacodynamics. Drugs metabolism	smart board	Theoretical examination
4	1	Covers The anatomy, neurotransmitter chemistry, receptor characteristics, and functional integration of the ANS	The autonomic nervous system (ANS).	smart board	Theoretical examination
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 examination

		indirectly through inhibition cholinesterase).			
6	4	Covers Drugs with The sympathomimetics constitute a very important group of drugs used for cardiovascular, respiratory, and other conditions	Adrenergic system.	smart board	Theoretical examination
7	2	Antimicrobial therapy takes advantage of the biochemical differences that exist between 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 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.	Principal of antimicrobial therapy.	smart board	Theoretical examination
8	4	The beta-lactams include some of the mosteffective, widely used, and well-tolerated agents available for the treatment of microbial infections. Vancomycin, fosfomycin, and bacitracin also inhibit cell wall synthesis but are not nearly as important as the beta-lactam drugs	β- lactam and other cell wall synthesis inhibitor antibiotics	smart board	Theoretical examination
9			MID EXAM		
10	3	The antimicrobial drugs reviewed in this lecture selectively inhibit bacterial protein synthesis. The mechanisms of protein synthesis in microorganisms are not identical to those of mammalian cells	Protien synthesis inhibitors	smart board	Theoretical examination

11	3	Describe how sulfonamides and trimethoprim affect bacterial folic acid synthesis and how resistance to the 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.	Quinolones, Folate antagonists, and urinary tract antiseptics.	smart board	Theoretical examinatio n
12	2	List 5 special problems associated with chemotherapy of mycobacterial infections. 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 of	Antimycobac terium drugs	smart board	Theoretical examinatio n

		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 interactions of the azoles. Identify the main topical antifungal agents.	Antifungal drugs.	smart board	Theoretical examination
14	2	Name the major 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 their	Antiprotozoal drugs.	smart board	Theoretical examination

		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	Theoretical examinatio n

47. Course Evaluation

Report 2% , quizzes 3% , mid exam 25% , final exam 70%

48. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lippencott's pharmacology,
Main references (sources)	Text books
Recommended books and references (scientific journals, reports…)	Articles
Electronic References, Websites	World health organization

Course Description Form

49. Course Name:
Clinical Toxicology
50. Course Code:
51. Semester / Year:
1st Semester / Fifth
52. Description Preparation Date:
21−3−2024
53.Available Attendance Forms:
Theoretical and practical
54.Number of Credit Hours (Total) / Number of Units (Total)
30 hours
55. Course administrator's name (mention all, if more than one name)
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 Objectives	To provide students with the principles and skills required to deal with the toxicity of chemicals and drugs in clinical settings. It helps students correlate signs and symptoms of toxicity with the analytical data, and know how to establish preventive and therapeutic measures for poisoning cases.

57. Teaching and Learning Strategies

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

58. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Initial Evaluation and Management of the Poisoned Patient. Including pediatric poisoning and special consideration of geriatric patient.	smart board	Theoretical examination

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	Theoretical examination
	1	Cover the mechanisms, manifestations of toxicity and management of OTC drugs	Drug Toxicity: Over the counter drugs, caffeine and theophylline		
3	2		Drug Toxicity: antihistamine, Decongestant; non-steroidal anti-inflammatory drugs and vitamins.	smart board	Theoretical examination
4	2	Cover the Signs and symptoms associated with these drugs poisoning ,also describe the cardiovascular outcomes that follow the toxicity	Toxicity of Prescription Medications: Cardiovascular drugs; Digoxin ; beta blockers and ACE inhibitors..	smart board	Theoretical examination
5	2		xicity of Prescription Medications: Cardiovascular gs : Calcium nnel blocker and Antiarrhythmic agents.	smart board	Theoretical examination
6	2	Cover the manifestations toxicity and management anticholinergic,antidepressant antipsychotic drugs	Toxicity Prescription Medications: A cholinergic, phenothiazines; TCA	smart board	Theoretical examination

7	2	Cover the manifestations of toxicity and management the toxicity (an illicit drug, or a licit drug used outside of legitimate medical practice) cause strong feelings of euphoria or alter perception.	Drug of Abuse: Opioids; Cocaine; phencyclidine;	smart board	Theoretical examination
8	2		Drug of Abuse: marijuana; Lysergic acid ; CNS stimulant	smart board	Theoretical examination
9	2	Cover: the most toxic plants that used by the human and the mech. of toxicity of the toxin included in it and management of those toxicity.	Toxic plants; Poisonous mushrooms.	smart board	Theoretical examination
10	2		Herbal preparations.	smart board	Theoretical examination
11	2	Coverthe manifestations of toxicity and management of sedative &hypnotic drugs and anti-diabetic agents	CNS depressants ,hypoglycemic agents		
12	2	Cover:- Types of chemicals and household toxin-manifestations of toxicity and management of these chemicals that may cause toxicity specially in children	Chemical and Environmental Toxins: Disinfectants, mphor and moth repellents	smart board	Theoretical examination
13	2		Chemical Environmental Toxins: Hydrocarbones;	smart board	Theoretical examination

59. Course Evaluation

Seminar 10% , quizzes 10% , mid exam 20% , final exam 60%

60. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Goldfrank's Toxicologic Emergencies, Casarett and Doull Toxicology
Main references (sources)	Text books
Recommended books and references (scientific journals, reports…)	Articles
Electronic References, Websites	World health organization

Course Description Form

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

21-3-2024

65.Available Attendance Forms:

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

67. Course administrator's name (mention all, if more than one name)

Name

م. د محمد فريد حميد
م.د هبة ماجد حمود
Email:
dr.mohammed.fared@nahrainuniv.edu.iq
dr.heba.majed@nahrainuniv.edu.iq

:

68. Course Objectives

Course Objectives	To study the principles of exposure to diffe chemicals and environmental factors and their sou as well as the mechanisms of toxicity and their ri human beings. The course helps students understan required measures to protect living organisms aga suspected toxic hazards

69. Teaching and Learning Strategies

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

70. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Cover the different areas toxicology, classification toxic agents , spectrum undesired effects, a characteristic of exposure	Introduction: general consideration; host factor, environmental factors of toxic effects.	smart board	Theoretical examination
2	2	Cover the undesi effects of differ toxic agents on b systems	Target organs and systemic toxicology: Renal system	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 b 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	Radiation and radioactive materials	smart board	Theoretical examination	
14	2	Cover : definition of cancer, multista of carcinogenesis, mechanism of acti of carcinogen	Carcinogenesis	smart board	Theoretical examination	
15	2		Final exam	smart board	Theoretical examination	

71. Course Evaluation

20% practical (10% quizzes and homework , 10%final practical exam), 20%mid exam , and 60%final exam

72. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Goldfrank's Toxicologic Emergencies, Casarett and Doull Toxicology
Main references (sources)	Text books
Recommended books and references (scientific journals, reports…)	Articles
Electronic References, Websites	World health organization

Course Description Form

73. Course Name:	
Physiology I	
74. Course Code:	
75. Semester / Year:	
1st semester / 2nd year	
76. Description Preparation Date:	
77. Available Attendance Forms:	
Theory	
78. Number of Credit Hours (Total) / Number of Units (Total)	
45	
79. Course administrator's name (mention all, if more than one name)	
Name: م.م سارة حيدر خالد 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 Learning Strategies	
Strategy	Cognitive goals A1. How to measures the physiological functions A2. How to read & understand ECG & EEG? A3. How to communicate with patient and educate him A4. How to prepare lectures and seminars The skills goals special to the program . B1. Cardiac output & respiratory rates measure skills B2. Blood pressure measures skill B3.patient education skill Teaching and Learning Methods Board ,smart board and power point

82. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Understand general concept of function of body organs	General and cellular basis of medical physiology	smart board	Theoretical examination
2	2 1	1) Understand general concept of function of body organs 2) Understand the function of nerve and tissue	1) General and cellular basis of medical physiology 2) Physiology of nerves and muscles	smart board	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 potential	Characteristic of excitable tissue	smart board	Theoretical examination

5	3	Understand transition o signals	Synaptic transmission	smart board	Theoretical examination
6	3	Understand the physiology of autonomic nervous system	The autonomic nervous system.	smart board	Theoretical examination
7	3	1) Understand signal transition between nerves and muscles 2) 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 function	Respiration:	smart board	Theoretical examination
9	3		Respiration:	smart board	Theoretical examination
10	2 1	1) understand pulmonary ventilation and function 2) Understand the body fluid Compartments and the function of the kidney	1) Respiration 2) 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 kidney =	Renal Physiology	smart board	Theoretical examination
13	1 2	1) Understand the body fluid Compartments and the function of the kidney 2) understand physiology of heart and circulatory system	Cardiovascular system	smart board	Theoretical examination
14	3	understand physiology of heart and circulatory system	Cardiovascular system	smart board	Theoretical examination
15	3		Cardiovascular system	smart board	Theoretical examination

83. Course Evaluation

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

84. Learning and Teaching Resources

Required textbooks (curricular books, if any)	*Review of Medical Physiology; Ganong W.F* and *Textbook of Medical Physiology by Guyton AC*
Main references (sources)	Text books
Recommended books and references (scientific journals, reports…)	Articles
Electronic References, Websites	World health organization

Course Description Form

85.	Course Name:
	Physiology I
86.	Course Code:
87.	Semester / Year:
1semseter / 2nd year	
88.	Description Preparation Date:
89.	Available Attendance Forms:
	Practical
90.	Number of Credit Hours (Total) / Number of Units (Total)
91.	Course administrator's name (mention all, if more than one name)
	Name: م.م سارة حيدر خالد Email: **sara.haider@nahrainuniv.edu.iq**
92.	Course Objectives

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 Learning Strategies

Strategy

Cognitive goals

A1. How to measures the respiratory rates & volumes?
A2. How to detect blood group?
A3. How to communicate with patient and educate him
A4. How to prepare lectures and seminars

The skills goals special to the program .

B1. respiratory rates measure skills
B2. Blood pressure measures skill
B3. patient education skill

Teaching and Learning Methods

Board ,smart board and power point

94. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Understand the respiratory function	Experiments on respiratory system (respiratory rate and volumes).	Practical experiment	Practical exam
2	2		Experiments on respiratory system (respiratory rate and volumes).	Practical experiment	Practical exam
3	2	Understand the types & functions blood composition	Introduction to blood physiology.	Practical experiment	Practical exam

4	2	Learning how to determine blood group	Blood typing and blood transfusion.	Practical experiment	Practical exam
5	2	Tutorial	Tutorial.	Practical experiment	Practical exam
6	2	Learning how to estimate packed cell volume	Packed cell volume.	Practical experiment	Practical exam
7	2	Learning how to estimate hemoglobin concentration	Determination of hemoglobin concentration.	Practical experiment	Practical exam
8	2	Learning how to estimate MCV, MCHC,Color index & MCH	Blood indecies.	Practical experiment	Practical exam
9	2	Learning how to measure bleeding and clotting tim	Determination of bleeding time and clotting time.	Practical experiment	Practical exam
10	2	Tutorial	Tutorial.	Practical experiment	Practical exam
11	2	Learning how to measure blood pressure	Blood pressure.	Practical experiment	Practical exam
12	2	Understand the effect of exercise on blood pressure (changes the blood pressure)	Effect of exercise on blood pressure.	Practical experiment	Practical exam
13	2		Effect of exercise on blood pressure.	Practical experiment	Practical exam
14	2	Tutorial	Tutorial.	Practical experiment	Practical exam
15	2	Final exam	Final exam		

95. Course Evaluation

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

96. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Physiology laboratory manual
Main references (sources)	Text books

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

Course Description Form

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

102. Number of Credit Hours (Total) / Number of Units (Total)
45

103. Course administrator's name (mention all, if more than one name)
Name: م.م سارة حيدر خالد Email: **sara.haider@nahrainuniv.edu.iq**

104. Course Objectives	
Course Objectives	To help students understand the basic princ of physiological functions of different issue organs of the human being, and how o eva these functions and correlate them with normal and abnormal conditions. It empha on the role of homeostatic and hem odyn changes in the integration of physiolog cal st

105. Teaching and Learning Strategies	
Strategy	Cognitive 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 seminars The 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 name	Learning method	Evaluation method
1	3	Understand the endocrine system physiology	Basic Concepts of Endocrine Regulation : evolution of hormones & their actions on target cells; hormone synthesis andsecretion;hormone transport in the blood; hormone action; principles of feedback control	smart board	Theoretical examination

2	3	Understand the physiology of hypothalamus & related hormones	Hypothalamic Regulation of Hormonal Functions: elation to the pituitary gland; relation to autonomic function; thirst; other factors regulating water intake; control of posterior pituitary secretion vasopressin & oxytocin; biosynthesis, intraneuronal transport, & secretion ;electrical activity of magnocellular neurons; vasopressin & oxytocin in other locations; control of anterior pituitary secretion	smart board	Theoretical examination
3	3	Understand the physiology of pituitary glands & related hormones	The Pituitary Gland: cell types in the anterior pituitary; growth hormone biosynthesis & chemistry; plasma levels, binding, & metabolism; growth hormone receptors; "effects on growth, effects on protein& electrolyte homeostasis, effects on carbohydrate& fat metabolism"; somatomedins	smart board	Theoretical examination
4	3	Understand the physiology of thyroid hormone	Thyroid Metabolic Hormones •formation & secretion of thyroid hormones •transport & metabolism of thyroid hormones •regulation of thyroid secretion •mechanism of action	smart board	Theoretical examination
5	3	Understand the physiology of adrenal gland	The Adrenal Medulla & Adrenal Cortex •adrenal medulla: structure & function of medullary hormones •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	smart board	Theoretical examination

			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 tical examin ation
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 tical examin ation
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 tical examin ation
9	3	Understand the hormonal changes during Puberty, menopause, fertilization pregnancy & lactation	Puberty, menopause, fertilization pregnancy & lactation	smart board	Theore tical examin ation
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 tical examin ation

			mellitus in humans		
11	3	Understand the physiology of GIT function and regulation	overview of gastrointestinal function and regulation •gastrointestinal secretion •gastrointestinal regulation •hormones and paracrine •enteric nervous system	smart board	Theoretical examination
12	3	Understand the food digestion & absorption	digestion absorption and nutritional principle •digestion and absorption of carbohydrate •protein and nucleic acid •lipids	smart board	Theoretical examination
13	3	Understand the GIT motility	gastrointestinal motility •general pattern of motility •segment-specific pattern of motility •stomach •small intestine •colon	smart board	Theoretical examination
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	Theoretical examination
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	smart board	Theoretical examination

107. Course Evaluation

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

108. Learning and Teaching Resources

Required textbooks (curricular books, if any)	*Review of Medical Physiology; Ganong W.F* and *Textbook of Medical Physiology by Guyton AC*
Main references (sources)	Text books
Recommended books and references (scientific journals, reports…)	Articles
Electronic References, Websites	World health organization

Course Description Form

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

116. Course Objectives

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.

117. Teaching and Learning Strategies

Strategy	Cognitive goals A1. How to measures the WBCs, RBCs & platelet count? A2. How to measures the differential WBCs count & ESR? A3. How to communicate with patient and educate him A4. How to prepare lectures and seminars The skills goals special to the program . B1. Renal function measure skills B2. Visual system measures skill B3. patient education skill Teaching and Learning Methods Board ,smart board and power point

118. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Learning how to count different types of white blood cells	Differential W.B.C count	Practical experiment	Practical exam
2	2		Differential W.B.C count	Practical experiment	Practical exam
3	2	Learning how to count white blood cells	Total W.B.C. count	Practical experiment	Practical exam
4	2	Tutorial	Tutorial	Practical experiment	Practical exam

5	2	Learning how to count red blood cells	Red blood cell counting	Practical experiment	Practical exam
6	2	Learning how to count platelets	Platelets counting	Practical experiment	Practical exam
7	2	Learning how to estimate erythrocyte sedimentation rate	Erythrocyte sedimentation rate (ESR)	Practical experiment	Practical exam
8	2	Tutorial	Tutorial	Practical experiment	Practical exam
9			Midterm exam		
10			Midterm 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	Tutorial and review	Practical experiment	Practical exam
15	2	Final exam	Final exam	Practical experiment	Practical exam

119. Course Evaluation

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

120. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Practical Physiology manual
Main references (sources)	Text books

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

Course Description Form

121. Course Name:	
Medical terminology	
122. Course Code:	
123. Semester / Year:	
1st semester / 1st year	
124. Description Preparation Date:	
125. Available Attendance Forms:	
Theoretical	
126. Number of Credit Hours (Total) / Number of Units (Total)	
15	
127. Course administrator's name (mention all, if more than one name)	
Name: م. د محمد فريد حميد Email: **dr.mohammed.fared@nahrainuniv.edu.iq**	
128. Course Objectives	
Course Objectives	To teach students how to pronounce, spell and def medical and pharmaceutical terms used in healt c settings. It will use a word-building strategy tha he them discover connections and relationships mo word roots, prefixes, and suffixes. Students will le rn meaning of each part of a complex medica pharmaceutical term, be able to put the parts togeth er define the term.
129. Teaching and Learning Strategies	
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

130. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1		Basic word roots and common suffixes	smart board	Theoretical examination
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		Symptoms, diagnoses, treatments, communication qualifiers, and statistics	smart board	Theoretical examination
10	1		Growth and development, and body orientation	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

30% mid exam , 70% final exam

132. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**A Short Course in Medical Terminology**
Main references (sources)	Text books
Recommended books and references (scientific journals, reports…)	books
Electronic References, Websites	Medical dictionary

Course Description Form

133. Course Name:	
134. Course Code:	
135. Semester / Year:	
136. Description Preparation Date:	
137. Available Attendance Forms:	
138. Number of Credit Hours (Total) / Number of Units (Total)	
139. Course administrator's name (mention all, if more than one name)	
Name: Email:	
140. Course Objectives	
Course Objectives	• ..... • ..... • .....

141. Teaching and Learning Strategies	
Strategy	

142. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

143. Course Evaluation

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

144. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

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. Course administrator's name (mention all, if more than one name)	
Name: Email:	
152. Course Objectives	
Course Objectives	• ..... • ..... • .....
153. Teaching and Learning Strategies	
Strategy	
154. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

155. Course Evaluation

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

156. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	