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

Course Description Form

1- Course name Anatomy

2- Course Code

3- Semester / Year: 20/2/2024

4- Description Preparation Date:

5- Available Attendance Forms:

6- Number of Credit Hours (Total) / Number of Units (Total)

7- Course administrator's name (mention all, if more than one name)

		Dr.Abdulla hadeed abdullahadeed@yahoo	o.com		
	8- Course	Objectives			
	l of the academic y	ear, the student should be a and the main functions rela		eral	
	nt will become acq	uainted with the detailed an cally and practically.	atomy of certain body org	ans and	
9-	Teaching and L	earning Strategies			
Strat	egy	- Cooperative Cond St - Real-Time Feedb - Observation Cha - Opinion Exchange	g Education Strategy cept Mapping Educat trategy. back Education Strateg ain Education Strateg and Discussion Educ	cion egy. gy.	
		Information Presen	trategy. Itation Education Stra Iting Scientific Updat Strategy Sture		ation
Evaluation	Learning	Information Presen Training and Presen 10– Course Struc	itation Education Stration Strategy		ation
Evaluation method	Learning method	Information Presen Fraining and Presen	itation Education Stration Strategy		eation weeks
		Information Presen Training and Presen 10– Course Struc	itation Education Stra ting Scientific Updat Strategy cture Required Learning	es Educ	

		tissues (epithelial,			
		connective, muscular,			
		nervous tissues, etc.)			
		Skeleton Anatomy (Skull)			
		Skeleton Anatomy (Vertebral Column and			
		thoracic cage).			
		Skeleton Anatomy (Thoracic			
		Cage) Skeleton Anatomny			
=	=	(pelvic, upper limb and	=	2	6-7
		lower limb)			
		Joints types, classification			
=	=	and functions . Joints of the	=	2	8-9
		Upper and Lower limb			
		Anatomy of muscular			
		system(Head and Neck).			
=	=	Anatomy of Muscular	=	2	10-11
		System (Upper and Lower			
		Limbs).			
		Anatomy of Muscular System (Pelvic). Blood			
=	=	Vessel and Blood	=	2	12-13
		Circulation			
		Anatomy of Cardiovascular			
		System.(Definition and			
		Classification) Anatomy of			
		the Heart, Cardiac (Covers,		2	14.16
=	=	Layers, Chambers and	=	2	14-16
		Valves Anatomy of			
		Digestive System(mouth,			
		Pharynx and oesophagus)			
		Anatomy of Digestive			
=	=	System (stomach and	=	2	17-18
		Intestine)			
=	_	Anatomy of genitourinary	_	2	19-20
—	=	system and Respiratory system	=	2	19-20
		Anatomy of C.N.S (Brain,			
=	=	spinal cord)	=	2	21
=	_	· · · ·		2	22.24
_	=	Spinal nerves	=	2	22-24
		Anatomy of peripheral		2	25.25
=	=	nervous system (cranial	=	2	25-26
		nervous, spinal nerves)			
=	_	Anatomy of endocrine system(definition, location,	_	2	27-28
_	=	connections and functions	=	۷	21-20
		Lymphatic system and			<u> </u>
=	=	respiratory system	=	2	29-30
				I	1
		10-Course structure (pra	actical)		
Evaluation	Learning		Required Learning		
	-	Unit or subject name		Hours	weeks
method	method		Outcomes		
Daily quizzes, oral and written exams, reports, and discussions	Cooperative Learning Strategy. -Brainstorming Education Strategy. -Cooperative Concept Mapping Education Strategy	Demonstration on human body model	Enhancing motivation for .1 learning in its various forms: internal motivation, social motivation, and achievement .motivation Encouraging self-directed and .2 indopedant learning, where	2	1
	Education Strategy. -Real-Time Feedback		independent learning, where students can take responsibility		

	Education Strategy. -Observation Chain Education Strategy. -Opinion Exchange		for their studies and have the ability to measure their academic .progress Creating opportunities to .3		
	and Discussion Education Strategy. -Information Presentation Education Strategy. Training and - Presenting Scientific Updates Education .Strategy		implement collaborative curriculum planning and to foster cooperation among faculty members to identify gaps and .repetitions Assisting students in ensuring .4 that curriculum and educational environment-related decisions are .sound Promoting a philosophy of .5 continuous monitoring and .improvement Helping students to affirm .6 accountability and ensure the .quality of academic programs		
=	=	Anatomical position, median plane and types of anatomical study. Surface anatomy : planes and vertical lines and Surface anatomy of the abdomen	=	2	2-4
=	=	Studying Tissues and cells by charts	=	2	5
=	=	Studying Bone and joints by models	=	2	7-6
=	=	Studying the general appearance of the Skull, and lower jaw	2	10-9-8	
=	=	Types of Joints, joints of upper and lower limb and trunk	=	2	12-11
=	=	Muscular system : types of muscles	=	2	13
=	=	Draw demonstration and draw discussion	=	2	15-14
=	=	Blood vessels in general using models and charts And Cardio- vascular system using models and charts	=	2	1716-
=	=	Veins and arteries, systemic circulation arteries And Studying Digestive system using models and charts	=	2	19-18
=	=	Studying Respiratory system using models and charts With Report and discussion	=	2	21-20
=	=	Studying Spinal cord, ventricles of the brain using models and charts Peripheral nervous system, cranial nerves	=	2	22-24
=	=	Studying Lymphatic system using models and charts	=	2	25-28
=	=	Report and discussion	=	2	29-30
		11- Course Evalu	uation		
Dietwihutin	a the score out of	100 according to the task	s assigned to the studen	tsuch	vlich ac

preparation, daily oral, monthly, or written exams, reports etc				
12- Learning and Teaching Resources				
Required textbooks (curricular books, if any)	GRAYS ANATOMY 5 TH EDITION			
-Main references (sources)	-Snell clinical anatomy by regions 10 th edition			
()	Grant atlas of anatomy 15 th edition			
Recommended books and references (scientif				
journals, reports)	.Clinically oriented anatomy by MOORE 9 th edition			
Electronic References, Websites	PUBMED and NCBI			

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

2024

Academic Program Description Form

University Name: Al-Furat Al-Awsat Technical University Faculty: College of Health and Medical Techniques-Kufa Scientific Department: Community Health Techniques Academic or Professional Program Name: (Medical Microbiology) Final Certificate Name: Philosophy doctorate Academic System: quarterly Description Preparation Date: 1/ 2/ 2024 File Completion Date: 3/ 2/ 2024

Signature	Signature:
Head of Department Name:	Scientific Associate Name:
Oday M. Hady	Miaad K. Alkhudhairy
Date: 3/ 2/ 2024	Date: 3/ 2/ 2024

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

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.

2

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.

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.

<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.

3

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.

Academic Program Description Form

University Name: Al-Furat Al-Awsat Technical University Faculty/Institute: College of health & medical techniques / Kufa Scientific Department: Community health techniques. Academic or Professional Program Name: Medical Microbiology Final Certificate Name. philosophy doctorate Academic System: quarterly Description Preparation Date: File Completion Date: Signature: Head of Department Name: Prof. Dr. Oday Mutaab Hady Date: 1/2/2024 Signature: Scientific Associate Name: Assist. Prof. Dr. Miaad K. Alkhudhairy Date: 1/2/2024

The file is checked by:

Department of Quality Assurance and University Performance Director of the Quality Assurance and University Performance Department: Date:

Signature:

Approval of the Dean

1. Program Vision

Program vision is written here as stated in the university's catalogue and website.

2. Program Mission

Program mission is written here as stated in the university's catalogue and website.

3. Program Objectives

General statements describing what the program or institution intends to achieve.

4. Program Accreditation

Does the program have program accreditation? And from which agency?

5. Other external influences

Is there a sponsor for the program?

6. Program Structure						
Program Structure	Number of	Credit hours	Percentage	Reviews*		
	Courses					
Institution						
Requirements						
College Requirements						

Department		
Requirements		
Summer Training		
Other		

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

7. Program Description						
Year/Level Course Code Course Name Credit Hourse				lours		
First stage		Medical Microbiology	theoretical	practical		
		Medical Microbiology	2	4		

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

Teaching and learning strategies and methods adopted in the implementation of

the program in general.

10. Evaluation methods

Implemented at all stages of the program in general.

11. Faculty

Faculty Members

Academic Rank			Special Requirements (if applicable)	'	Number of the teaching staff			
	General	Special			Staff	Lecturer		

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

(Setting regulations related to enrollment in the college or institute, whether central admission or others)

13. The most important sources of information about the program

State briefly the sources of information about the program.

14. Program Development Plan

	Program Skills Outline														
				Required program Learning outcomes											
,				Knov	Knowledge			Skills			Ethics				
		optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	

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

1. Course Name: Medical Microbiology

2. Course Code:

3. Semester / Year: The first stage

4. Description Preparation Date:

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total): 6/8

7. Course administrator's name (mention all, if more than one name) Name: Dr. Miaad K. Alkhudhairy and Dr. Oday M. Hady Email: Email: kuh.mead@atu.edu.iq

8. Course Objectives

Course Objectives	General goal:
	The student should be able to know pathogenic microbes, how to
	diagnose them, and the diseases they cause and control them.
	Special goal:
	1 - The student should be able to know the pathogenic microbes
	(bacteria, fungi, viruses, and protozoa) that infect the body's
	systems.
	The various diseases, their epidemiology, symptoms, how to
	control each disease, and the study of the body's resistance to the
	studied diseases.
	2- To recognize the epidemiology and symptoms of microbial
	diseases and control each disease
9. Teaching and Learning S	trategies
Strategy	Cooperative education strategy.
	Teaching strategy brainstorming.
	Education strategy collaborative concept planning.
	Education strategy real-time feedback
	Education strategy notes series.
	Education strategy by exchanging opinions and discussion.
	Education strategy by presenting information.

		Educa	01	ough training and	presenting scie
	<u></u>		pments.		
10. Course	Structure	e (A) Theoretical	lectures	1	
Week	Hours	Required	Unit or	Learning	Evaluation
		Learning	subject name	method	method
		Outcomes			
1-2	2	 Raising the level of motivation for learning of its various types: internal motivation, social motivation, and achievement motivation. Encouraging self- directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. Creating opportunities to implement a collective planning approach to the curriculum, and for cooperation among faculty members to identify gaps and repetitions. Helping the student to ensure that decisions related to the curricula and educational environment are rational. Promoting the philosophy of follow- up and continuous improvement. Helping the student to ensure accountability and ensure the quality of academic programs. 	General bacteriology; History and scope	 Cooperative education strategy. Education strategy brainstorming. Education strategy collaborative concept planning. Education strategy real time feedback Education strategy notes series. Education strategy by exchanging opinions and discussion. Education strategy by presenting information. Education strategy through training and presenting scientific developments. 	Daily, oral and written examinations, reports, discussions.
3-4	2	=	Morphology of bacteria; Nutritional requirement of bacteria	=	
5-6	2	=	Bacterial metabolism; Infection; Classification; Bacterial & viral infections.	=	=
7-13	2	=	Systematic bacteriology; Staphylococcus; Neisseria; Corynebacteria; Mycobacteria; Bacillus; & Clostridium	=	=
14	2	=	Enterobacteriaceae, Salmonella, E. coli, shield	=	=
<u>15</u> 16	2 2	=	Pseudomonas Vibrio	=	=

17	2	=	Rubella	=	=
= ,					
18	2	=	Hemophiles	=	=
19	2	=	Bordetella	=	=
20	2	=	Spirochetes	=	=
21	2	=	Rickettsia	=	=
22	2	=	Chlamydia and mycoplasma	=	=
23	2	=	Immunology; immunity	=	=
24	2	=	Antigens	=	=
25	2	=	Antibodies; immunoglobulin	=	=
26	2	=	Antigen and Antibody reaction, The complement system	=	=
27-	2	=	Structure and function of immune system, The immune response	=	=
28	2	=	Hypersensitivity	=	=
29	2	=	Some important virus diseases; Hepatitis B	=	=
30	2	=	General bacteriology; History and scope	=	=
11. Course	Structure	e (B) Practical le			

Week	Hours	Required	Unit or	Learning	Evaluation
		Learning	subject name	method	method
		Outcomes			
1	2	 Raising the level of motivation for learning of its various types: internal motivation, social motivation, and achievement motivation. Encouraging self- directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. Creating opportunities to implement a collective planning approach to the curriculum, and for cooperation among faculty members to identify gaps and repetitions. Helping the student to ensure that decisions related to the curricula and educational environment are rational. Promoting the philosophy of follow- up and continuous improvement. Helping the student to ensure 	Safety in Microbiology Lab. And the main equipment	 Cooperative education strategy. Education strategy brainstorming. Education strategy collaborative concept planning. Education strategy real time feedback Education strategy notes series. Education strategy by exchanging opinions and discussion. Education strategy by presenting information. Education strategy through training and presenting scientific developments. 	Daily, oral and written examinations, reports, discussions.

		accountability and ensure the quality of academic programs.			
2	2	=	Electron microscope usage	=	
3	2	=	Equipment of Sterilization and disinfection	=	=
4	2	=	Media and nutrient preparation	=	=
5	2	=	Solid, semisolid, and liquid media	=	=
6	2	=	Isolation of bacteria from urine, blood, soil	=	=
7	2	=	Cultivation of bacteria	=	=
8	2	=	Preparation of smear	=	=
9	2	=	Staining and the types of stain	=	=
10	2	=	Differences between Gram +ve and Gram -ve stain	=	=
11	2	=	Morphology of bacteria (shapes)	=	=
12	2	=	Coccid shape bacteria	=	=
13	2	=	Bacilli shape bacteria	=	=
14	2	=	Spiral and filamentous shapes of bacteria	=	=
			bacteria; Show slide about Staphylococcus. genus of bacteria; Show slide about Vibrio cholera bacteria; Show slide about Escherichia coli bacteria; Show slide about Pseudomonas aeruginosa bacteria ⁴ Show slide about Bordet Ella genus of bacteria; Show slides about Bacillus genus of bacteria; Show slide about Proteus genus of bacteria; Show slide about Hemophilia genus of bacteria		
28	2	=	Show slides of some pathogenic bacteria	=	=
29	2	=	Visit Genetic engineering center for practice (PCR Techniques)	=	=
30	2	=	Visit Biotechnology center for practice (ELISA	=	=
2. Cours			ing to the tasks as	signed to the st	udent suc

13. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Main references (sources)	 Bergey's Manual of Systematic Bacteriology by John G. Holt (Editor); Noel R. Krieg (Editor) Biochemical Tests for Identification of Medical Bacteria, Jean F. Mac McFadden Lippincott Williams & Wilkins. Sherris Medical Microbiology, Seventh Edition.
Recommended books and references (scientific journals, reports)	 Journal of Clinical Microbiology Critical Reviews in Microbiology Nature Reviews Microbiology Journal of Virology The ISME Journal FEMS Microbiology Reviews Journal of Bacteriology International Journal of Food Microbiology Microbiology and Molecular Biology Reviews
Electronic References, Websites	 American Society for Microbiology "to advance microbiological sciences through the pursuit of scientific knowledge and dissemination of the results of fundamental and applied research." Careers blog at ASM Useful career info, from choosing a post-doc position to HOW TO FIND THE SCIENCE CAREER FOR YOU Microbiology Society Membership organization for scientists who work in all areas of microbiology. Largest in Europe. Society for Industrial Microbiology "Nonprofit, international association dedicated to the advancement of microbiological sciences, especially as they apply to industrial products, biotechnology, materials, and processes."

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

Course Description Form

1- Course name

Epidemiology 2- Course Code

3- Semester / Year: 29/2/2024

4- Description Preparation Date:

5- Available Attendance Forms:

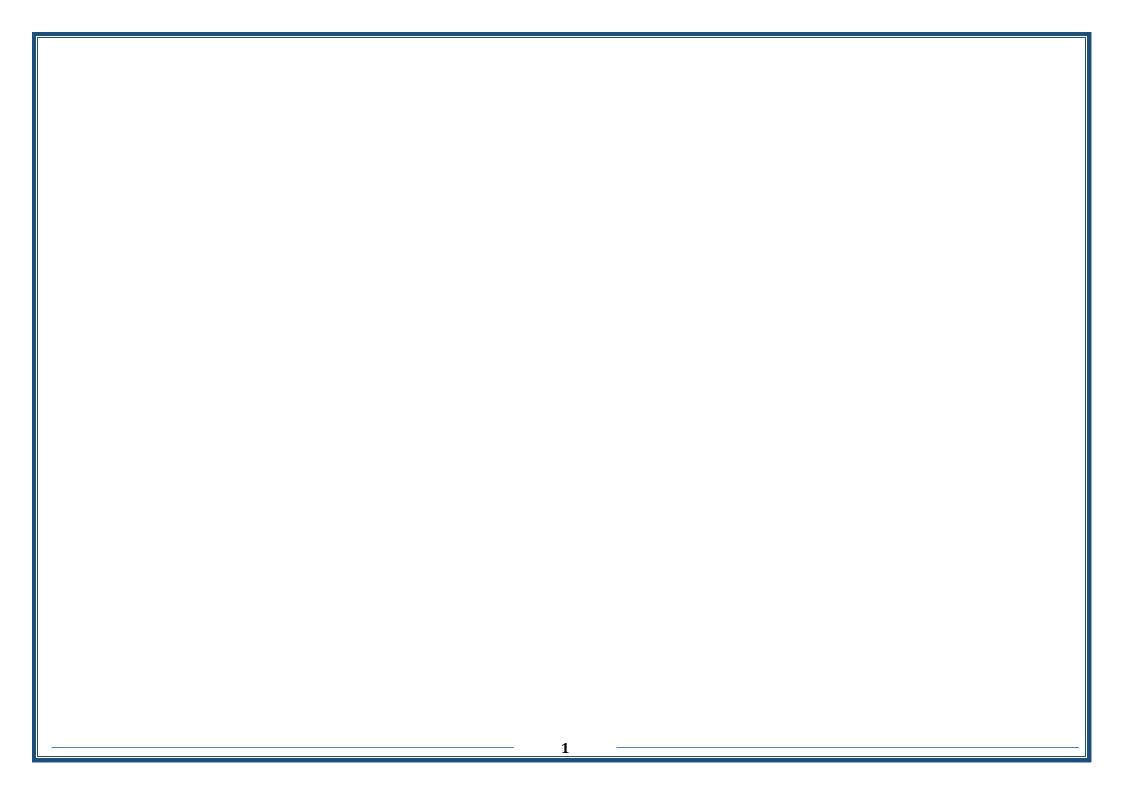
6- Number of Credit Hours (Total) / Number of Units (Total)

7- Course administrator's name (mention all, if more than one name) Lecturer: Mohammed Malih Radhi <u>Mohammed.amri92@gmail.com</u>

		8- Course Objecti	ves		
Specific object	ctive: Calculating t	ases occur and how to analy he spread of diseases, calcu fectious diseases are transn	lating the different rates o		
	·	earning Strategies			
Strat	egy	 Cooperative education strategy. Teaching strategy brainstorming. Education strategy collaborative concept planning. Education strategy real-time feedback Education strategy notes series. Education strategy by exchanging opinions an discussion. Education strategy by presenting information. Education strategy through training and presenting scientific developments. 			ons and nation.
		10- Course Struc	cture		
Evaluation method	Learning method	Unit or subject name	Required Learning Outcomes	Hours	weeks
Daily quizzes, oral and written exams, reports, .and discussions	-Cooperative Learning Strategy. Brainstorming Education Strategy. -Cooperative Concept Mapping Education Strategy. Real-Time Feedback Education Strategy. Observation Chain Education Strategy. Opinion Exchange and Discussion Education Strategy. Information Presentation Education Strategy. Training and Presenting Scientific Updates Education Strategy.	Definition & objective of epidemiology	1-Enhancing motivation for learning in its various forms: internal motivation, social motivation, and achievement motivation. 2-Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3-Creating opportunities to implement collaborative curriculum planning and to foster cooperation among faculty members to identify gaps and repetitions. 4-Assisting students in ensuring that curriculum and educational environment-related decisions are sound. 5-Promoting a philosophy of continuous monitoring and improvement. 6-Helping students to affirm accountability and ensure the quality of academic programs.	2	1-2
=	=		= =	2	3-5
=	=	Definition & objective of epidemiology	=	2	6-7
		Definition & objective of		2	8.0
=	=	epidemiology	=	2	8-9

=	=	Epidemiology of infectious diseases	=	2	12-13
=	=	Agents & mode of transmission	=	2	14-16
=	=	Agents & mode of transmission	=	2	17-18
=	=	Agents & mode of transmission	=	2	19-20
=	=	Herd immunity	=	2	21
=	=	The effect of environment	=	2	22-24
=	=	The effect of environment	=	2	25-26
=	=	Exploring diseases	=	2	27-28
		occurrence Exploring diseases		2	20.20
=	=	occurrence-place	=	2	29-30
		10-Course structure (pra	actical)		
Evaluation	Learning		Required Learning		
method	method	Unit or subject name	Outcomes	Hours	weeks
Daily quizzes, oral and written exams, reports, and discussions	-Cooperative Learning Strategy. -Brainstorming Education Strategy. -Cooperative Concept Mapping Education Strategy. -Real-Time Feedback Education Strategy. -Observation Chain Education Strategy. -Opinion Exchange and Discussion Education Strategy. -Information Presentation Education Strategy. -Training and Presenting Scientific Updates Education Strategy.	Training for calculation	 Enhancing motivation for learning in its various forms: internal motivation, social motivation, and achievement motivation. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. Creating opportunities to implement collaborative curriculum planning and to foster cooperation among faculty members to identify gaps and repetitions. Assisting students in ensuring that curriculum and educational environment-related decisions are sound. Promoting a philosophy of continuous monitoring and improvement. Helping students to affirm accountability and ensure the quality of academic programs. 	2	1
=	=	Incidence rate	=	2	2-4
=	=	Incidence rate	=	2	5
=	=	Prevalence rate	=	2	7-6
=	=	Prevalence rate	=	2	10-9-8
=	=	Mortality rate	=	2	12-11
=	=	Training for problem	=	2	13
=	=	Specificity	=	2	15-14
=	=	Specificity	=	2	1716-
=	=	Validity	=	2	19-18
=	=	Validity	=	2	21-20
=	=	Seminars & example	=	2	22-24
=	=	Case control study	=	2	25-28

=	=	Cross-section	study	=	2	29-30	
	11- Course Evaluation						
Distributin	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					as daily	
12- Learning and Teaching Resources							
Required textbooks (curricular books, if any)			Philadelph Wilkins; 20	J, Greenland S, Lash TL. Moo ia: Wolters Kluwer Health/Lip 008 Sep 20. J. Epidemiology: an introduct 2 May 4.	pincott W	'illiams &	
-Main refere	-Main references (sources)			urnal of Clinical Microbiology itical Reviews in Microbiology uture Reviews Microbiology urnal of Virology the ISME Journal			
Recommen	ded books and ref	erences (scientif				.1	
journals, re	ports…)			Nieto FJ. Epidemiology: ones & Bartlett Publishers	•	the	
Elec	tronic References,	Websites		Google scholar			

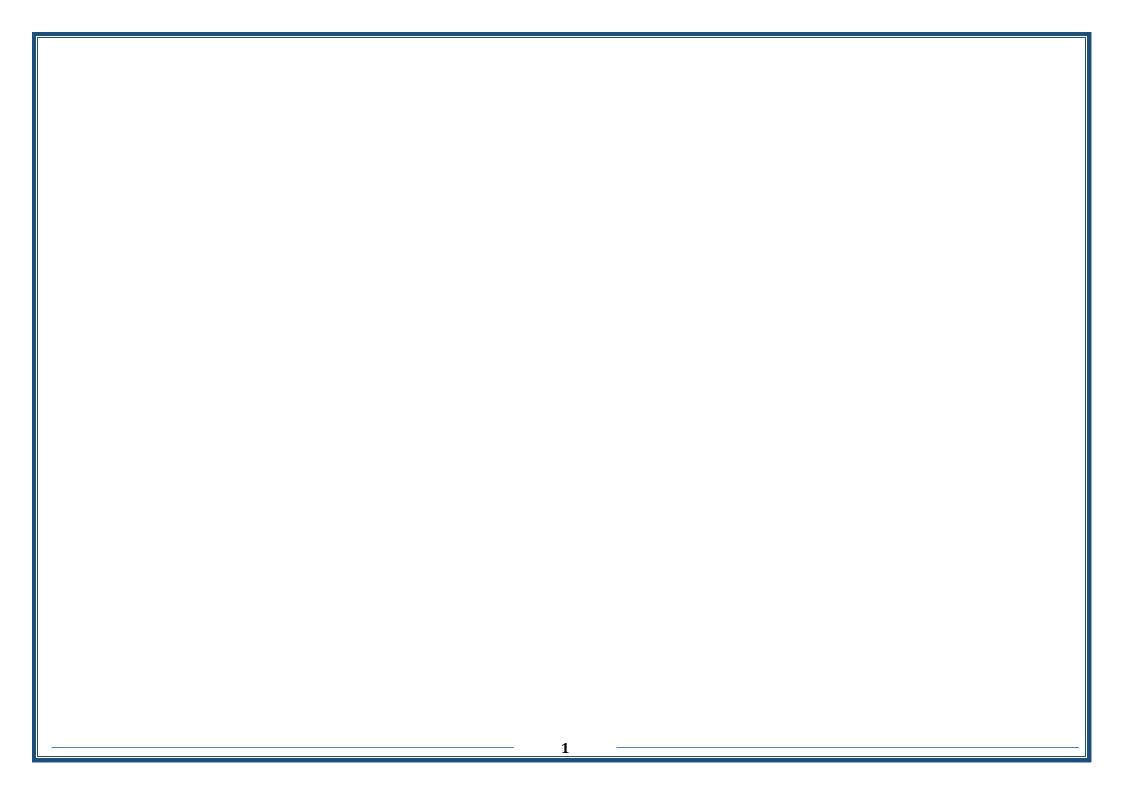


1. Course Name:	Communicable Diseases I
2. Course Code:	
3. Semester / Yea	r: First semester/ Second stage
4. Description Pro	eparation Date:14-2-2024
5. Available Atten	dance Forms:
6. Number of Crea	lit Hours (Total) / Number of Units (Total) 6/4
Name: Manar k	strator's name (mention all, if more than one name) Kareem Al-Quraishy Idelckm@atu.edu.iq
8. Course Objectiv	ves
Course Objectives	 The student learns about diseases that are transmitted from humans to humans or from animals to humans. That the student becomes familiar with the methods of disease transmission in general and the definitions used in the course. The student learns about diseases caused by viruses and bacteria. Learns how to control or prevent communicable diseases.
9. Teaching and L	earning Strategies
Strategy	 Note-taking and summarizing strategy. Self-questioning strategy. Brainstorming strategy. Cooperative learning strategy. Reciprocal teaching or discussion strategy Education strategy by presenting information. Education strategy through training and presenting scientific development Strategy for developing thinking.
10. Course Structure	
A/ Theoretical	

Week		Required Learning	Unit or subject	Learning	Evaluation
	Hours	Outcomes	name	method	method
1	2	 Raising the level of motival for learning of its various ty internal motivation, so motivation, and achieven motivation. Encouraging self-directed independent learning, wi students can take responsibility their studies and have the abilit measure their academic progress Creating opportunities implement a collective plan approach to the curriculum, and cooperation among fac members to identify gaps repetitions. Helping the student to ensure decisions related to the curri- and educational environment rational. Promoting the philosophy follow-up and continu improvement. Helping the student to en- accountability and ensure quality of academic programs. 	scope	 Note-taking an summarizing strategy. Self-questionin strategy. Brainstorming strategy. Cooperative learning strategy. Cooperative learning strategy. Reciprocal teaching or discussion strateg Education strate by presenting information. Education strate through training a presenting scientid developments. Strategy for developing thinking 	examinations, repordiscussions.
2	2	=	Transmission of infection diseases	=	=
3	2	=	Isolation measures for infectious diseases.	=	=
4-6	2	=	Definitions	=	=
7	2	=	Viral diseases Measles	=	=
8	2	=	Rubella	=	=
9	2	=	Congenital rubella	=	=
10	2	=	Chicken pox and herpes zoster	=	=
11	2	=	Small pox	=	=
12	2	=	Common cold and influenza	=	=
13	2	=	Enter –virus, poliomye	=	=
14	2	=	Rabies	=	=
15	2	=	Mumps and infectious mononucleosis	=	=
B/ Prac	tical				
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method

	4	1. Raising the level of motiva	Introduction to the	1. Note-taking an	Daily, oral and writ
		for learning of its various ty	meaning of prevention	summarizing	examinations, report discussions.
		internal motivation, so	control	strategy. 2. Self-questionir	discussions.
		motivation, and achieven		strategy.	
		motivation.		3. Brainstorming	
		2. Encouraging self-directed		strategy.	
		independent learning, wl		4. Cooperative	
		students can take responsibility		learning strategy.	
		their studies and have the abilit		5. Reciprocal	
		measure their academic progress		teaching or	
		3. Creating opportunities		discussion strateg	
		implement a collective plan		6. Education strat	
		approach to the curriculum, and		by presenting information.	
		cooperation among fac		7. Education strat	
		members to identify gaps		through training a	
		repetitions.		presenting scienti	
		4. Helping the student to ensure		developments.	
		decisions related to the curri		8. Strategy for	
		and educational environment		developing thinki	
		rational.			
		5. Promoting the philosophy			
		follow-up and continu			
		improvement.			
		6. Helping the student to en			
		accountability and ensure			
		quality of academic programs.			
2	4		Definition of the technic		
2	1	=	terms used in the subject	=	=
3	4	_	Transmission of infecti	_	_
5	1	=	diseases	=	=
4-6	4		Isolation measures of		
10	1	=	infectious diseases	=	=
7	4	=	Epidemiological triad	=	=
8	4	=	Agent	=	=
9	4	=	Host	=	=
10	4	=	Environment	=	=
11	4	_	Chain of events in an		_
		=	infectious process –	=	=
			reservoir		
					=
12	4	—	Chain of events in an	_	—
12	4	=	Chain of events in an infectious process – por	=	
12	4	=	infectious process – por	=	
	4		infectious process – por of exit		
12		=	infectious process – por of exit Chain of events in an	=	=
			infectious process – por of exit Chain of events in an infectious process – age		=
13		=	infectious process – por of exit Chain of events in an infectious process – age transmission and entry	=	
	4		infectious process – por of exit Chain of events in an infectious process – age transmission and entry Chain of events of even		=
13	4	=	infectious process – por of exit Chain of events in an infectious process – age transmission and entry	=	
13	4	=	infectious process – por of exit Chain of events in an infectious process – age transmission and entry Chain of events of even in an infectious process	=	=
13	4	=	infectious process – por of exit Chain of events in an infectious process – age transmission and entry Chain of events of even in an infectious process host Introduction to the	=	
13	4	=	infectious process – por of exit Chain of events in an infectious process – age transmission and entry Chain of events of even in an infectious process host	=	=
13 14 15 Distribu	4 4 4 ting the	= = = score out of 100 accordin	infectious process – por of exit Chain of events in an infectious process – age transmission and entry Chain of events of even in an infectious process host Introduction to the meaning of prevention control g to the tasks assign	= = = ned to the stu	=
13 14 15 Distribu	4 4 4 ting the	=	infectious process – por of exit Chain of events in an infectious process – age transmission and entry Chain of events of even in an infectious process host Introduction to the meaning of prevention control g to the tasks assign	= = = ned to the stu	=
13 14 15 Distribu daily pre	4 4 ting the eparation	= = = score out of 100 accordin	infectious process – por of exit Chain of events in an infectious process – age transmission and entry Chain of events of even in an infectious process host Introduction to the meaning of prevention control g to the tasks assign itten exams, reports	= = = ned to the stu	=

Main references (sources)	 Methodology Research by C.R. Kothari Hand book of Research Methodology by Dr. St B.M. & Shashi Alok Research Methodology Concise Book by Me Yahya Al-Nour Research Methodology by Dr. Nishikant Jha Research Methodology and Scientific Writing b George Thomas Methodology of educational research by Lokesh K
Recommended books and references (scientific journals, reports)	 Fundamentals of Research methodology book Methods in educational research book Methodology articles by BMC Medical Research Methodology National Institute of Health in research Methodology International Journal of Research and Review
Electronic References, Websites	 San Jose State University The University of Western Australia The University of Edinburgh web. Science Direct.com

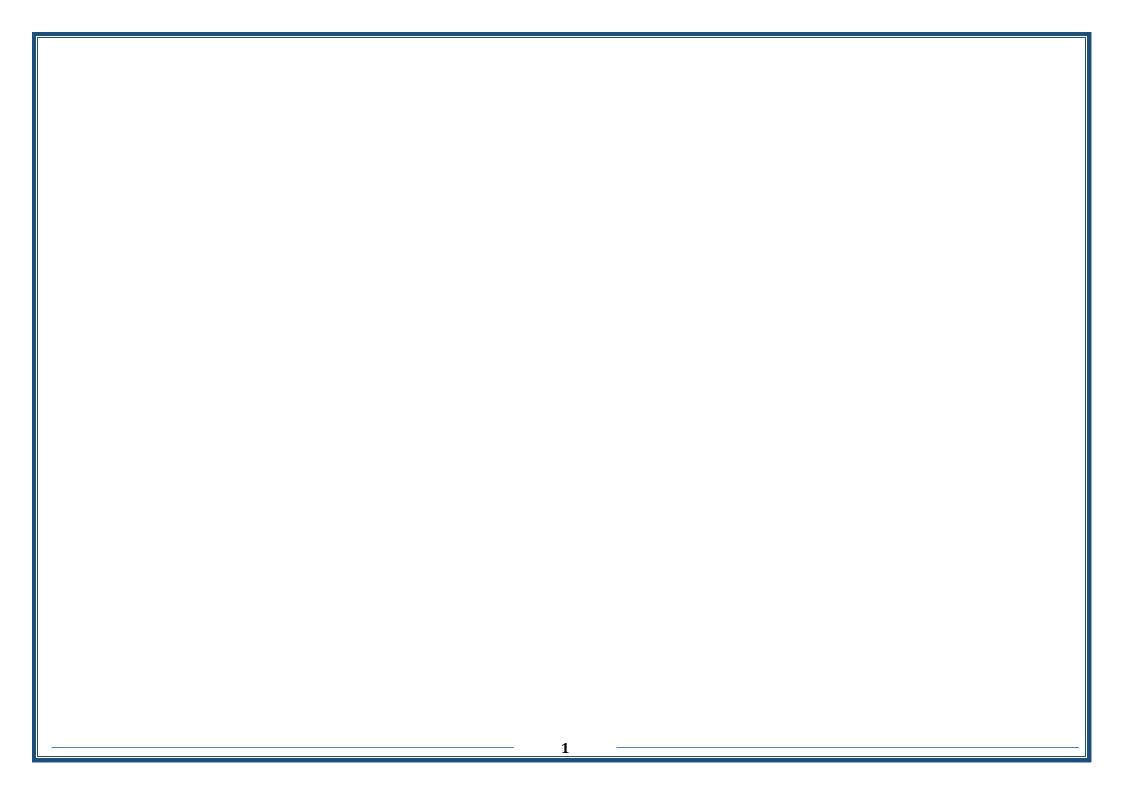


 Course Name: Course Code: 	Communicable Diseases II
2. Course Code:	
2. Course coue.	
3. Semester / Ye	ear: Second semester/ Second stage
4 Description P	reparation Date:14-2-2024
5. Available Atte	ndance Forms:
6. Number of Cre	edit Hours (Total) / Number of Units (Total) 6/4
7. Course admir	nistrator's name (mention all, if more than one name)
	Kareem Al-Quraishy fadelckm@atu.edu.iq
8. Course Object	ives
Course Objectives	 The student learns about diseases that are transmitted from humans to humans or from animals to humans. That the student becomes familiar with the methods of disease transmission in general and the definitions used in the course. The student learns about diseases caused by viruses and bacteria. Learns how to control or prevent communicable diseases.
9. Teaching and	Learning Strategies
Strategy	 Note-taking and summarizing strategy. Self-questioning strategy. Brainstorming strategy. Cooperative learning strategy. Reciprocal teaching or discussion strategy Education strategy by presenting information. Education strategy through training and presenting scientific developments. Strategy for developing thinking.
10. Course Structure	2
A/ Theoretical	

Week		Required Learning	Unit or subject	Learning	Evaluation
	Hours	Outcomes	name	method	method
1	2	 Raising the level of motival for learning of its various ty internal motivation, so motivation, and achieven motivation. Encouraging self-directed independent learning, wi students can take responsibility their studies and have the abilit measure their academic progress Creating opportunities implement a collective plant approach to the curriculum, and cooperation among fac members to identify gaps repetitions. Helping the student to ensure decisions related to the curri and educational environment rational. Promoting the philosophy follow-up and continu improvement. Helping the student to ensure quality of academic programs. 	diseases	 Note-taking an summarizing strategy. Self-questionin strategy. Brainstorming strategy. Cooperative learning strategy. Reciprocal teaching or discussion strateg Education strateg Education strateg Education strateg Education strateg Strategy for developments. Strategy for 	examinations, repo discussions.
2	2	=	Hepatitis virus A	=	=
3	2	=	Hepatitis virus B	=	=
4	2	=	Hepatitis virus C	=	=
5	2	=	AID	=	=
6	2	=	Whooping cough	=	=
7	2	=	Diphtheria	=	=
8	2	=	Clostridia infections – tetanus	=	=
9	2	=	Tetanus neonatorum	=	=
10	2	=	Brucellosis	=	=
11	2	=	Anthrax	Ξ	=
12- 13	2	=	Bacterial meningitis	=	=
14	2	=	Viral meningitis	=	=
15	2	=	Revision of prevention measures	=	Ξ
B/ Prac	tical				
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method

1-3	4	 Raising the level of motiva for learning of its various ty internal motivation, so motivation, and achieven motivation. Encouraging self-directed independent learning, wi students can take responsibility their studies and have the abilit measure their academic progress Creating opportunities implement a collective plan approach to the curriculum, and cooperation among fac members to identify gaps repetitions. Helping the student to ensure decisions related to the curri and educational environment rational. Promoting the philosophy follow-up and continu improvement. Helping the student to en accountability and ensure quality of academic programs. 	incidence , prevalence , mortality rate and case	 Note-taking an summarizing strategy. Self-questionin strategy. Brainstorming strategy. Cooperative learning strategy. Reciprocal teaching or discussion strateg Education strateg Education strateg Education strateg Education strateg Strategy for developments. Strategy for developing thinkite 	Daily, oral and writ examinations, repor discussions.
4	4	=	Epidemic measures in control of infectious diseases	=	=
5	4	=	Health education in infection diseases	=	=
6	4	=	Notification of diseases	=	=
7	4	=	International measures i control of infectious diseases	=	=
8-10	4	=	Control of blood borne diseases	=	=
11	4	=	Control of water and for borne diseases	=	=
12	4	=	Control of arthropod bo diseases	=	=
13	4	=	Visits to the communica diseases center	=	=
14	4	=	Visit to the T.B institute	=	=
15	4	=	Visit to the isolation	=	=
daily pr	reparation	score out of 100 accordin n, daily oral, monthly, or wr and Teaching Resource	itten exams, reports		ident such as
		ks (curricular books, if any)			
	ferences (Hand bool B.M. & Shashi Alok Research Yahya Al-Nour 		hodology by Dr. Sł ncise Book by Me

	 Research Methodology and Scientific Writing b George Thomas Methodology of educational research by Lokesh K
Recommended books and references (scientific journals, reports)	 Fundamentals of Research methodology book Methods in educational research book Methodology articles by BMC Medical Research Methodology National Institute of Health in research Methodology International Journal of Research and Review
Electronic References, Websites	 San Jose State University The University of Western Australia The University of Edinburgh web. Science Direct.com

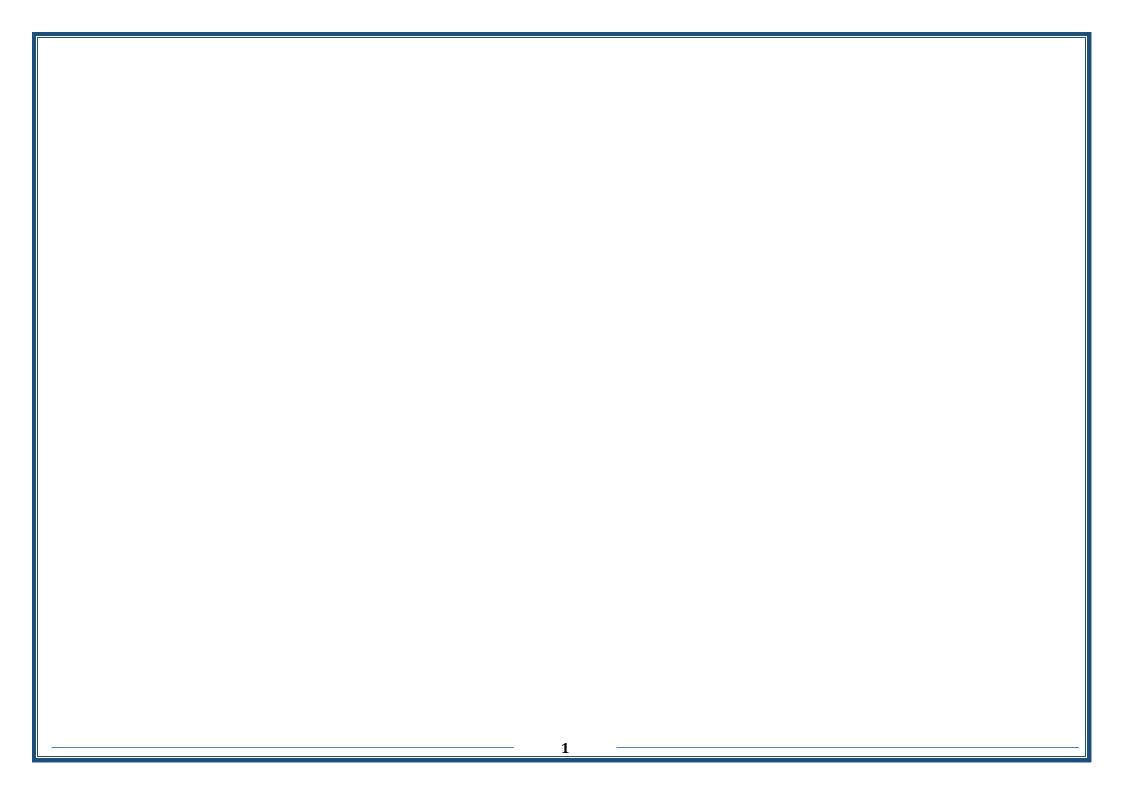


 Course Name: Course Code: 	Communicable Diseases II
2. Course Code:	
2. Course coue.	
3. Semester / Ye	ear: Second semester/ Second stage
4 Description P	reparation Date:14-2-2024
5. Available Atte	ndance Forms:
6. Number of Cre	edit Hours (Total) / Number of Units (Total) 6/4
7. Course admir	nistrator's name (mention all, if more than one name)
	Kareem Al-Quraishy fadelckm@atu.edu.iq
8. Course Object	ives
Course Objectives	 The student learns about diseases that are transmitted from humans to humans or from animals to humans. That the student becomes familiar with the methods of disease transmission in general and the definitions used in the course. The student learns about diseases caused by viruses and bacteria. Learns how to control or prevent communicable diseases.
9. Teaching and	Learning Strategies
Strategy	 Note-taking and summarizing strategy. Self-questioning strategy. Brainstorming strategy. Cooperative learning strategy. Reciprocal teaching or discussion strategy Education strategy by presenting information. Education strategy through training and presenting scientific developments. Strategy for developing thinking.
10. Course Structure	2
A/ Theoretical	

Week		Required Learning	Unit or subject	Learning	Evaluation	
	Hours	Outcomes	name	method	method	
1	2	 Raising the level of motival for learning of its various ty internal motivation, so motivation, and achieven motivation. Encouraging self-directed independent learning, wi students can take responsibility their studies and have the abilit measure their academic progress Creating opportunities implement a collective plant approach to the curriculum, and cooperation among fac members to identify gaps repetitions. Helping the student to ensure decisions related to the curri and educational environment rational. Promoting the philosophy follow-up and continu improvement. Helping the student to ensure quality of academic programs. 	diseases	 Note-taking an summarizing strategy. Self-questionin strategy. Brainstorming strategy. Cooperative learning strategy. Reciprocal teaching or discussion strateg Education strateg Education strateg Education strateg Education strateg Strategy for developments. Strategy for 	examinations, repo discussions.	
2	2	=	Hepatitis virus A	=	=	
3	2	=	Hepatitis virus B	=	=	
4	2	=	Hepatitis virus C	=	=	
5	2	=	AID	=	=	
6	2	=	Whooping cough	=	=	
7	2	=	Diphtheria	=	=	
8	2	=	Clostridia infections – tetanus	=	=	
9	2	=	Tetanus neonatorum	=	=	
10	2	=	Brucellosis	=	=	
11	2	=	Anthrax	Ξ	=	
12- 13	2	=	Bacterial meningitis	=	=	
14	2	=	Viral meningitis	=	=	
15	2	=	Revision of prevention measures	=	Ξ	
B/ Practical						
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation	
		Outcomes	name	method	method	

1-3	4	 Raising the level of motiva for learning of its various ty internal motivation, so motivation, and achieven motivation. Encouraging self-directed independent learning, wi students can take responsibility their studies and have the abilit measure their academic progress Creating opportunities implement a collective plan approach to the curriculum, and cooperation among fac members to identify gaps repetitions. Helping the student to ensure decisions related to the curri and educational environment rational. Promoting the philosophy follow-up and continu improvement. Helping the student to en accountability and ensure quality of academic programs. 	incidence , prevalence , mortality rate and case	 Note-taking an summarizing strategy. Self-questionin strategy. Brainstorming strategy. Cooperative learning strategy. Reciprocal teaching or discussion strateg Education strateg Education strateg Education strateg Education strateg Strategy for developments. Strategy for developing thinkite 	Daily, oral and writ examinations, repor discussions.
4	4	=	Epidemic measures in control of infectious diseases	=	=
5	4	=	Health education in infection diseases	=	=
6	4	=	Notification of diseases	=	=
7	4	=	International measures i control of infectious diseases	=	=
8-10	4	=	Control of blood borne diseases	=	=
11	4	=	Control of water and for borne diseases	=	=
12	4	=	Control of arthropod bo diseases	=	=
13	4	=	Visits to the communica diseases center	=	=
14	4	=	Visit to the T.B institute	=	=
15	4	=	Visit to the isolation	=	=
daily pr	reparation	score out of 100 accordin n, daily oral, monthly, or wr and Teaching Resource	itten exams, reports		ident such as
		ks (curricular books, if any)			
	ferences (Hand bool B.M. & Shashi Alok Research Yahya Al-Nour 		hodology by Dr. Sł ncise Book by Me

	 Research Methodology and Scientific Writing b George Thomas Methodology of educational research by Lokesh K
Recommended books and references (scientific journals, reports)	 Fundamentals of Research methodology book Methods in educational research book Methodology articles by BMC Medical Research Methodology National Institute of Health in research Methodology International Journal of Research and Review
Electronic References, Websites	 San Jose State University The University of Western Australia The University of Edinburgh web. Science Direct.com



Course Description Form

1. Course Name: pharmacology

2. Course Code: Second semester/ Second stage

3. Semester / Year: semester

4. Description Preparation Date:

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total): 4/6

7. Course administrator's name (mention all, if more than one name) Name: Saad saleem Raheem Email: kuh.sad@atu.edu.ig

8. Course Objectives

Course Obje	ectives	 At the end of the academic year, the student will be able to know the Groups of medications as well as the m important medications used in pharmacy and hospitals. The student learns about chronic diseases and their effects on the body and its effectiveness 			
9. Teachi	ng and Learnir	g Strategies			
Strategy	education note seri	ive education strategy. Technical strategy brainstorming. In strategy collaborative concept planning. Education strategy es. Education strategy by exchanging opinion and discussion ng information. Education strategy through training a	on. educatior	n strategy by	
10. Cours	se Structure-th	eory			
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

	2	 Raising the level of motivation for learning of its various types: internal motivation, social motivation, and achievement motivation. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. Creating opportunities to implement a collective Promoting the philosophy of follow-up and continuous improvement. Helping the student to ensure the quality of academic programs. Planning proach to the curriculum, and for cooperation among Faculty members to identify gaps and repetitions. 	Pharmacology definitions	Cooperative education strategy. Teaching strategy brainstorming. Education strategy collaborative concept planning. Education strategy real-tir feedback Education strategy notes series. Education strategy by exchanging opinions and discussion. Education strategy by presenting information. Education strategy throug training and presentation Scientific developments.	
3-5	2	=	Pharmacokinetics Basic & clinical aviation of new drug.	=	=

6-7	2	_	Drugs acting autonomic nervous syst Introduction, Cholinoceptor activating dr Cholinoceptor blocking dr Adrenoceptor activating dr Adrenoceptor blocking drugs	=
8-9	2	_	Drug acting cardiovascular system Antihypertensi Antianginal, Cardiac glyco = & other di used congestive, H failure, A arrhythmias	=
10-11	2	=	Drugs acting renal sys = diuretics:	=
12-13	2	=	Autacoids polypeptides, Histamine & blocks Seroto Ergot alkalc Prostaglandin,	=

14-16	2	=	Drugs acting respiratory system, Respiratory center stimul Antitussives, Drugs used bronchial asthr	=
17-18	2	=	Drugs acting central nerv system, Anxiolytics sedative hypnotics, Antiepileptic, General anesthetics, L anesthetic, L anesthetic, Skeletal mus relaxants, parkinsonism, Antipsychotics antigenic, Antidepressant Opioid agonis antagonists, C stimulants, Dr of abuse	=

19-20	2	=	Drugs acting hematopoietic system, Bl forming ag Agents used = hyperlipidemia Drugs used disorders coagulation	=
21-22	2	=	Drugs used treat inflammation, Non – sterc anti-inflammat = agnate, Non opined analge Drugs used gout	=
23-24	2	=	Drugs used peptic ulc Anti-emetics, = Anti-diarrthoca laxatives	=

25-26	2	=	Endocrine dr Hypothalamic pituitary hormones, Thyroid & a thyroid dr Adrenocorticor oids adrenocortical agent, gondolas hormones inhibitors, Pancreatic hormones & a diabetics, Ag	=	=
			hormones & a		
27-28	2	=	Chemotherape s	=	=

L
oui R
ourse Struc
-30 2

1	2	 Raising the level of motivation for learning of its v arious internal motivation, social motivation, and achievement motivation. Encouraging self-directed and independent learnin students can take responsibility for their studies an ability to measure their academic progress. Creating opportunities to implement a collective Promoting the philosophy of follow-up and continu- improvement. Helping the student to ensure the quality of acad Planning proach to the curriculum, and for cooperation amore Faculty members to identify gaps and repetitions. 	rmacology definitions	Cooperative education strategy. Teaching strategy brainstorming. Education strategy collaborative concept plann Education strategy real-time feedback Education strategy notes series. Education strategy by exchanging opinions and discussion. Education strategy by presenting information. Education strategy through training and presentation Scientific developments.	
3-2-1	2	=	pharmacokinetics	=	=

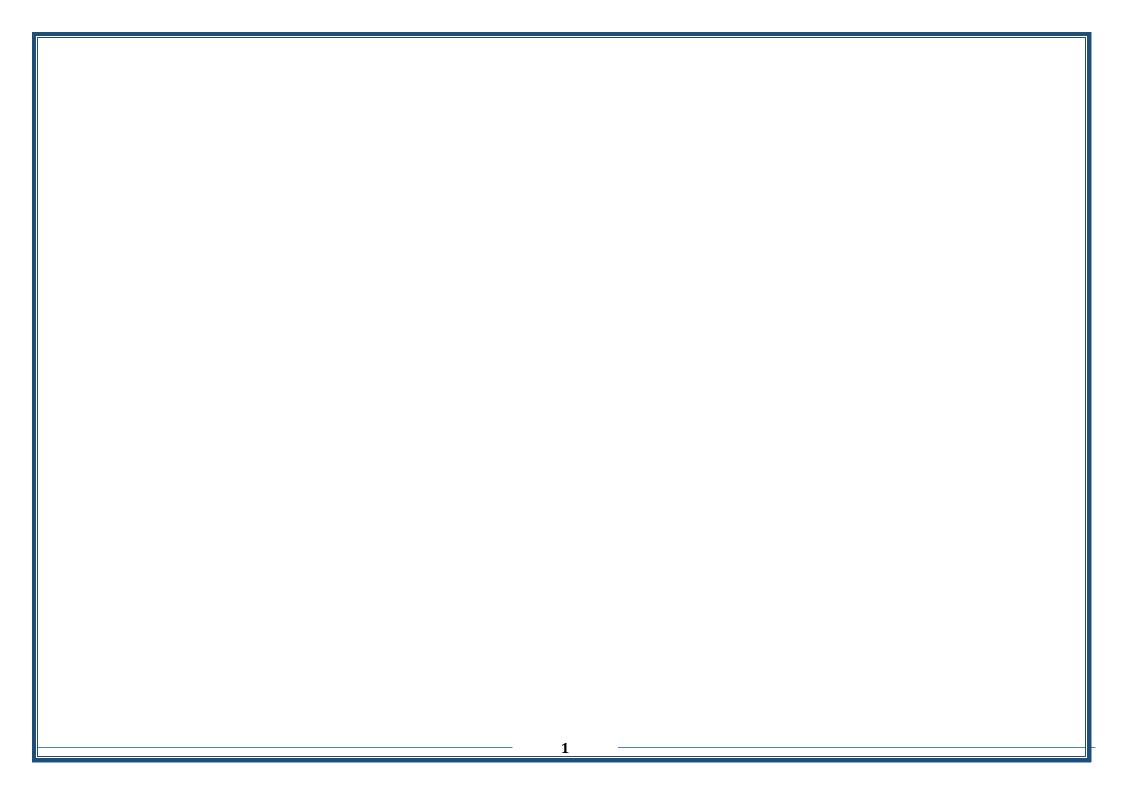
5-4	2	=	Routes administrations	=	=
7-6	2	=	Kinetics of fix dose / fixed tim interval regimens	=	=
10-9-	2	=	Quantitative Asp of Renal E Elimination		=
12-11	2	=	pharmacodynamic	=	=
13	2	=	Applications ELIZA	=	=
15-14	2	=	Basic formula	=	=
1716-	2	=	Maintenance Dose	=	=

19-18	2	=	Loading Dose	=	=
21-20	2	=	Pediatric Dose	=	=
23-22	2	=	Cromatography	=	=
25-24	2	=	Synthesis of Aspin	=	=
28-27	2	=	Metrology	=	=
30-29	2	=	How to pre solutions percentage	=	=

11. 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

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	 -Richard A.Harvey ,Pamela C.Champe , Finkel, Richard; Clark, Michelle A.; Cubeddu, and Luigi X. (2009). Lippincott's Illustrated Reviews: Pharmacology, 4th Edition. -Teferra Abula, Srinivasa A.Rao, Amare Mengistu, Solomomon Worku, Eshetu Legesse, Musie Aberra ,and Dawit (2004).PHARMACOLOGY.University of Gondar ,In collaboration with the Ethiopia Public Health Training Initiative, The Carter Center, the Ethiopia Ministry of Health, and the Ethiopia Ministry of Education.
Main references (sources)	Lippincott, Illustrated Reviews: Pharmacology, Sixth Edition
Recommended books and references (scientific journals, reports)	
Electronic References, Websites	



Course Description Form

1. Course Name: pharmacology

2. Course Code: First semester/ Second stage

3. Semester / Year: semester

4. Description Preparation Date:

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total): 4/6

7. Course administrator's name (mention all, if more than one name) Name: Saad saleem Raheem Email: kuh.sad@atu.edu.ig

8. Course Objectives

Course Obje	ectives	 At the end of the academic year, the student will be able important medications used in pharmacy and hospitals. The student learns about chronic diseases and their effect 			as well as the m
9. Teachi	ng and Learnir	ig Strategies			
Strategy	education note seri	ive education strategy. Technical strategy brainstorming. n strategy collaborative concept planning. Education strateg es. Education strategy by exchanging opinion and discussion ing information. Education strategy through training a	on. educatior	n strategy by	
10. Cours	se Structure-th	eory			
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

	2	 Raising the level of motivation for learning of its various types: internal motivation, social motivation, and achievement motivation. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. Creating opportunities to implement a collective Promoting the philosophy of follow-up and continuous improvement. Helping the student to ensure the quality of academic programs. Planning proach to the curriculum, and for cooperation among Faculty members to identify gaps and repetitions.	Pharmacology definitions	Cooperative education strategy. Teaching strategy brainstorming. Education strategy collaborative concept planning. Education strategy real-tir feedback Education strategy notes series. Education strategy by exchanging opinions and discussion. Education strategy by presenting information. Education strategy throug training and presentation Scientific developments.	
3-5	2	=	Pharmacokinetics Basic & clinical aviation of new drug.	=	=

6-7	2	=	Drugs acting autonomic nervous syst Introduction, Cholinoceptor activating dr Cholinoceptor blocking dr Adrenoceptor activating dr Adrenoceptor blocking dr	=
8-9	2	=	Drug acting cardiovascular system Antihypertensi Antianginal, Cardiac glyco = & other di used congestive, H failure, arrhythmias	=
10-11	2	=	Drugs acting renal sys = diuretics:	=
12-13	2	=	Autacoids polypeptides, Histamine & blocks Seroto Ergot alkalo Prostaglandin,	=

14-16	2	=	Drugs acting respiratory system, Respiratory center stimul Antitussives, Drugs used bronchial asthr	=
17-18	2	=	Drugs acting central nerv system, Anxiolytics sedative hypnotics, Antiepileptic, General anesthetics, L anesthetic, L anesthetic, Skeletal mus relaxants, parkinsonism, Antipsychotics antigenic, Antidepressant Opioid agonis antagonists, C stimulants, Dr of abuse	=

19-20	2	=	Drugs acting hematopoietic system, Bl forming ag Agents used = hyperlipidemia Drugs used disorders coagulation	=
21-22	2	=	Drugs used treat inflammation, Non – sterc anti-inflammat = agnate, Non opined analge Drugs used gout	=
23-24	2	=	Drugs used peptic ulc Anti-emetics, = Anti-diarrthoca laxatives	=

Chamatharana	25-26	2	=	Endocrine dr Hypothalamic pituitary hormones, Thyroid & a thyroid dr Adrenocorticos oids adrenocortical agent, gondolas hormones inhibitors, Pancreatic hormones & a diabetics, Ag that affect b mineral bomeostasis	=	=
27-28 2 $=$ $-$	27-28	2	=	homeostasis. Chemotherape	=	=

1
u R
urse Struc
30 2

	2	 Raising the level of motivation for learning of its v arious internal motivation, social motivation, and achievement motivation. Encouraging self-directed and independent learnin students can take responsibility for their studies an ability to measure their academic progress. Creating opportunities to implement a collective Promoting the philosophy of follow-up and continu improvement. Helping the student to ensure the quality of acad Planning proach to the curriculum, and for cooperation amotivation Faculty members to identify gaps and repetitions. 	rmacology definitions	Cooperative education strategy. Teaching strategy brainstorming. Education strategy collaborative concept plann Education strategy real-time feedback Education strategy notes series. Education strategy by exchanging opinions and discussion. Education strategy by presenting information. Education strategy through training and presentation Scientific developments.	
3-2-1	2	=	pharmacokinetics	=	=

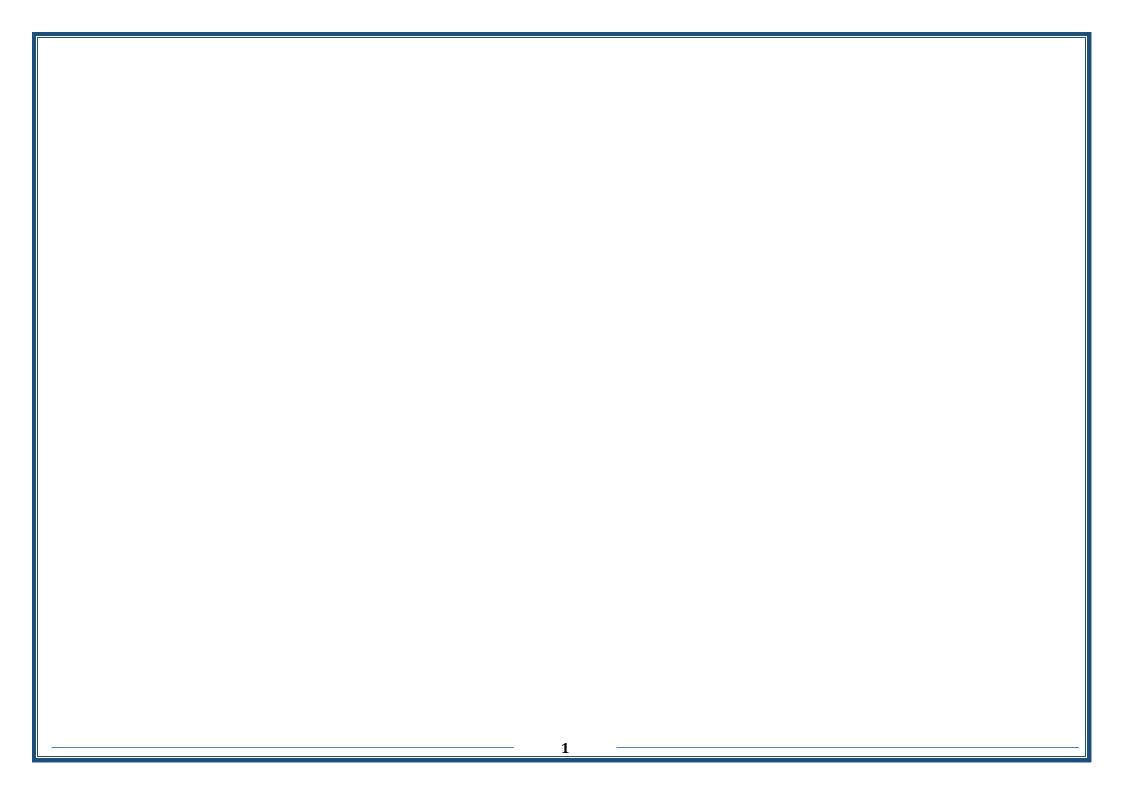
5-4	2	=	Routes administrations	=	=
7-6	2	=	Kinetics of fix dose / fixed tim interval regimens	=	=
10-9-;	2	=	Quantitative Asp of Renal E Elimination		=
12-11	2	=	pharmacodynamic	=	=
13	2	=	Applications ELIZA	=	=
15-14	2	=	Basic formula	=	=
1716-	2	=	Maintenance Dose	=	=

19-18	2	=	Loading Dose	=	=
21-20	2	=	Pediatric Dose	=	=
23-22	2	=	Cromatography	=	=
25-24	2	=	Synthesis of Aspin	=	=
28-27	2	=	Metrology	=	=
30-29	2	=	How to pre solutions percentage	=	=

11. 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

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	 -Richard A.Harvey ,Pamela C.Champe , Finkel, Richard; Clark, Michelle A.; Cubeddu, and Luigi X. (2009). Lippincott's Illustrated Reviews: Pharmacology, 4th Edition. -Teferra Abula, Srinivasa A.Rao, Amare Mengistu, Solomomon Worku, Eshetu Legesse, Musie Aberra ,and Dawit (2004).PHARMACOLOGY.University of Gondar ,In collaboration with the Ethiopia Public Health Training Initiative, The Carter Center, the Ethiopia Ministry of Health, and the Ethiopia Ministry of Education.
Main references (sources)	Lippincott , Illustrated Reviews: Pharmacology, Sixth Edition
Recommended books and references (scientific journals, reports)	
Electronic References, Websites	



Course Description Form

Course Description Form						
1. Course Name: Methodology						
2. (Course (Code:				
3. 5	Semeste	er / Year	: Third stage			
4. I	Descript	tion Pre	paration Date:1	4-2-2024		
~	A •1 1 1	A 44 1				
. . <i>. .</i>	Availabl	e Attend	ance Forms:			
6. I	Number	of Credi	t Hours (Total)	[/] Number of Units ((Total) 1/2	
7. (Course	adminis	strator's name (mention all, if mo	ore than one	e name)
			areem Al-Qurai			/
			lelckm@atu.edu	•		
8 (Course (Objective				
		-		t learn about the differer	nt types of studi	es how to
Course	Objectives	5	conduct them, and	the objectives and obsta	cles of each stu	dy.
			2 . Learn about methods of research models and conducting statistical analyses.			
				t be able to prepare the r	research proper	ly.
9. Teaching and Learning Strategies						
Strategy	,		1 Note tolding and			
			 Note-taking and summarizing strategy. Self-questioning strategy. 			
3. Brainstorming strategy.						
4. Cooperative learning strategy.5. Reciprocal teaching or discussion strategy						
6. Education strategy by presenting information.						
 Education strategy through training and presenting scientific development Strategy for developing thinking. 					itific developmen	
10 0						
10. Course Structure						
Week	Hours	Require	d Learning	Unit or subject	Learning	Evaluation

		Outcomes	name	method	method
-			name		
1	1	 Raising the level of motiva for learning of its various ty internal motivation, so motivation, and achieven motivation. Encouraging self-directed independent learning, wl students can take responsibility their studies and have the abilit measure their academic progress Creating opportunities implement a collective plan approach to the curriculum, and cooperation among fac members to identify gaps repetitions. Helping the student to ensure decisions related to the curri and educational environment rational. Promoting the philosophy follow-up and continu improvement. Helping the student to en accountability and ensure quality of academic programs. 	Research; definition, characteristics & type	 Note-taking an summarizing strategy. Self-questionin strategy. Brainstorming strategy. Cooperative learning strategy. Reciprocal teaching or discussion strateg Education strateg Education strateg Education strateg Education strateg Teducation strateg Strategy for developments. Strategy for developing thinking 	examinations, repor discussions.
2	1	=	The study population	=	=
3	1	=	Control group	Ξ	=
4	1	=	Sampling	=	=
5	1	=	Design strategies in epidemiological: Descripti studies, Analytic 5 studies	=	=
6	1	=	Types of epidemiological studies; Descriptive studie	=	=
7	1	=	Correlation studies	=	=
8	1	=	Case report & case series studies	=	=
9	1	=	Cross-sectional surveys	Ξ	=
10	1	=	Case control studies: Issue the design conduct of case control	Ξ	=
11	1	=	Issues in the analysis	=	Ξ
12	1	=	Issues in the interpretation	=	=
13	1	=	Limitations	=	=
14	1	=	Cohort studies: Types of cohort studies	=	=
15	1	=	Issues in the design & con of cohort studies	=	=
16	1	=	Issues in analysis	=	=
17	1	=	Issues in the interpretation	=	=
18	1	=	Limitations	=	=
19	1	=	Intervention studies	=	=
20	1	=	Types of intervention stud	=	=

21	1	=	Unique problem of intervention studies	=	=
22	1	=	Issues in the design & con of clinical trials	=	Н
23	1	=	Analysis of epidemiology studies	Н	Ξ
24	1	=	Evaluation the role of bias	Π	=
25	1	=	Types of bias; control of b	=	=
26	1	II	Analysis of epidemiologic studies	=	Ξ
27	1	II	Evaluating the role of confounding	Η	Ξ
28	1	=	 The nature of confounding 18 Methods to control confounding in the design 	П	=
29	1	Ξ	Methods to control confounding in the analysi	Η	Ξ
30	1	=	Revision & examinations	=	=

11. 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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	 Methodology Research by C.R. Kothari Hand book of Research Methodology by Dr. Sł B.M. & Shashi Alok Research Methodology Concise Book by Me Yahya Al-Nour Research Methodology by Dr. Nishikant Jha Research Methodology and Scientific Writing b George Thomas Methodology of educational research by Lokesh K
Recommended books and references (scientific journals, reports)	 Fundamentals of Research methodology book Methods in educational research book Methodology articles by BMC Medical Research Methodology National Institute of Health in research Methodology International Journal of Research and Review
Electronic References, Websites	 San Jose State University The University of Western Australia The University of Edinburgh web. Science Direct.com

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

2024

Academic Program Description Form

University Name: Al-Furat Al-Awsat Technical University Faculty: College of Health and Medical Techniques-Kufa Scientific Department:Community Health Techniques Academic or Professional Program Name: Final Certificate Name: Academic System: Description Preparation Date: File Completion Date:

Signature: Head of Department Name: Signature: Scientific Associate Name:

Date:

Date:

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department: Date:

Signature:

Approval of the Dean

1. Program Vision

Program vision is written here as stated in the university's catalogue and website.

2. Program Mission

Program mission is written here as stated in the university's catalogue and website.

3. Program Objectives

General statements describing what the program or institution intends to achieve.

4. Program Accreditation

Does the program have program accreditation? And from which agency?

5. Other external influences

Is there a sponsor for the program?

6. Program Structure					
Program Structure	Number of	Credit hours	Percentage	Reviews*	
	Courses				
Institution					
Requirements					
College Requirements					
Department					
Requirements					
Summer Training					
Other					

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

7. Program Description									
Year/Level	Course Code	Course Name	Credit Hours						
			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

Teaching and learning strategies and methods adopted in the implementation of the program in general.

10. Evaluation methods

Implemented at all stages of the program in general.

11. Faculty			
Faculty Members			
Academic Rank	Specialization	Special Requirements/Skills (if applicable)	Number of the teaching staff

General	Special		Staff	Lecturer

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

(Setting regulations related to enrollment in the college or institute, whether central admission or others)

13. The most important sources of information about the program

State briefly the sources of information about the program.

14. Program Development Plan

	Program Skills Outline														
							Req	uired	progr	am Lo	earnin	g outcor	nes		
Year/Level	Course Code	Course Name	Basic or	Knov	vledge			Skills	S			Ethics			
			optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C 3	C4

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

Course Description Form

1. Course Name:

Communicable diseases

2. Course Code:

3. Semester / Year:

Fourth stage

4. Description Preparation Date:

27-2-2024

- 5. Available Attendance Forms:
- 6. Number of Credit Hours (Total) / Number of Units (Total)
 6\8
- 7. Course administrator's name (mention all, if more than one name) Name: Dr.Zeena Kareem Gihad
 - Email: zina.jehad@atu.edu.iq
- 8. Course Objectives

Course Objectives

General objective: The student learns about the most import transmissible diseases and ways to control them.

Special objective: To be able to delve into the areas of spread of communicable diseases and their methods transmission - methods of controlling them - measuring the r of spread of the disease.

9. Teaching and Learning Strategies

Strategy

Cooperative education strategy.

Teaching strategy brainstorming.

Education strategy collaborative concept planning.

Education strategy real-time feedback

Education strategy notes series.

Education strategy by exchanging opinions and discussion.

Education strategy by presenting information.

		Ed	ucation strategy thro	ugh training and pres	enting scientific develop	ments.
10. Co	ourse	Str	ucture			
Week	Hour	S	Required Learning Outcomes	Unit or subject name(Theorotical)	Learning method	Evaluation method
	2		Required learning outcomes 1. Raising the level of motivation for learni of its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self- directed and independent learning where students can the responsibility for the studies and have the ability to measure the academic progress. 3. Creating opportunities to implement a collection planning approach to the curriculum, and fice cooperation among faculty members to identify gaps and repetitions. 4. Helping the student to ensure that decision related to the curricu- and educational environment are rational. 5. Promoting the philosophy of follow and continuous improvement. 6. Helping the student to ensure the qua of academic program		Cooperative education strategy. Teaching strategy brainstorming. Education strategy collaborative concept planning. Education strategy real-tif feedback Education strategy notes series. Education strategy by exchanging opinions and discussion. Education strategy by presenting information. Education strategy throug training and presenting scientific developments.	Daily exams Oral and wri reports, discussion
2	2		=	Gonorrhea	=	=
3-4	2		=	Diarrheal diseases; Diarrheal caused by E.coli	=	=
5	2		=	Acute Rota viral enter	=	=
6-7	2		=	Acute Rota viral enter	=	=
8-9	2		=	Food poisoning. staph aureus – B. cereus,	=	=

			Shigellosis; C.		
			perferings		
10	2	=	Epidemic viral	=	=
10	-		Gastroenteritis		
11	2	=	Campylobacter enteri	=	=
12-25	2	=	Candia is;	=	=
12-23	2	_	Dematophytosis;	—	_
			Giardiasis; Amoebia		
			yellow fever:		
			Leishmanaiasis; Mala		
			Toxoplasmosis;		
			pediculosis; Scabies;		
			Teaniasis:		
			Bilharzias is; Ascaria		
			Hydatid diseases		
26	2	=	Ancylostoma	=	=
20	2	=	Pin worm		=
28-30	2	=	Review of important		
20-30	L _	-	topics	_	
Week	Hours	Dequined		Looming mothed	Evaluation
vv eek	nours	Required	Unit or subject	Learning method	method
		Learning Outcomes	name(practical)		methoa
1-4	4		Concept of mayon	Cooperativa	Deily aroma
1-4	4	1. Raising the level of	· ·	-	Daily exams
		motivation for learni	in general	strategy.	Oral and wri
		of its various types:		Teaching strat	reports, discussions
		internal motivation,		brainstorming. Education strat	
		social motivation, an			
		achievement		collaborative cond	
		motivation.		planning.	
		2. Encouraging self-		Education strategy r	
		directed and		time feedback	
		independent learning		Education strategy no	
		where students can ta		series.	
		responsibility for the		Education strategy	
		studies and have the		exchanging opinions	
		ability to measure the		discussion.	
		academic progress.		Education strategy	
		3. Creating		presenting information	
		opportunities to		Education strat	
		implement a collectiv		through training	
		planning approach to		presenting scient	
		the curriculum, and f		developments.	
		cooperation among			
		faculty members to			
		identify gaps and			
		repetitions.			
		4. Helping the studer			
		to ensure that decision			
		related to the curricu			
		and educational			
		environment are			
		rational.			
		5. Promoting the			
	1	philosophy of follow	4		
		and continuous improvement.			

	6. Helping the stud to ensure accountable and ensure the qua of academic program			
-		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
5 4	=	Visit to CDC to Prevention leishmaniasis in Iraq	=	=
6 4	=	Prevention of malari		=
7 4	=	Prevention of bilhar	=	=
8 4	=	Prevention toxoplasmosis in Irac	=	=
9 4	=	Prevention hemorrhagic in Iraq	=	=
10-15 4	=	Visit to T.B. institute see the policy of DC program		=
16-22 4	=	Surveillance of disea	=	=
23-26 4	=	nvestigation of epidemic	=	=
27-30 4	=	Outbreak investigation	II	=
-	and Teaching Resources ooks (curricular books, if a	Case sLippir	studies in infection acott s guide to inf	ectious disease
		Protec	nunicableDiseaseC ction Handbook	
Main references	s (sources)	Comn An Of Health Baltin • 2. Da Medic Londo • 3. Do Child Willia • 4. Esh Diseas Africa Nairol • 5. Har Medic • 6. Heg	nunicable Diseases fficial Report of the n Association, The nore. widson, S., 1999, F eine, 18th edition, I on. nowitz, 1996, Infe Care Center and P ums Wilkins, USA. nuis Manschot, 197 ses: A Manual for in Medical and Res bi. trison, S., 1998, Pr eine, 14th edition, I gazi M. 1994, App	n, 1995, Control of Manual, 16th edition, e American Public United Book Press, Inc, Principles and Practice of Harcourt, Edinburgh, ection Control in the reschool, 3rd edition, 78, Communicable Rural Health Workers, search Association, inciples of Internal McGraw-Hill, U.S.A lied Human Parasitology, ic Book Centers, Cairo.

Recommended books and references (scientific journals, reports)	 8. Madeleine Fletcher, 1992, Principles and Practice of Epidemiology, Addis Ababa University, Ethiopia. 9. Meseret Shiferaw, Haile Tena, 1990, A Manual for Students and Health Workers, Ministry of Health, Ethiopia. 10. Ministry of Health, 1997, Manual of Natio Tuberculosis and Leprosy Control Program, edition Journal of Clinical Microbiology Critical Reviews in Microbiology Nature Reviews Microbiology Journal of Virology The ISME Journal FEMS Microbiology Reviews Journal of Bacteriology International Journal of Food Microbiology Microbiology and Molecular Biology Reviews
Electronic References, Websites	 American Society for Microbiology advance microbiological sciences through pursuit of scientific knowledge and dissemination the results of fundamental and applied research". Careers blog at ASM

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

Course Description Form

1- Course name

Occupational Safety

2- Course Code:Four

3- Semester / Year: 29/2/2024

4- Description Preparation Date:

5- Available Attendance Forms:

6- Number of Credit Hours (Total) / Number of Units (Total)

7- Course administrator's name (mention all, if more than one name) Lecturer: Mohammed Malih Radhi <u>Mohammed.amri92@gmail.com</u>

		8- Course Objecti	ves		
of maintainin Specific Obje 1- Learn how 2- Identify th 3- Learn abo	ng them ective: The student y to deal with toxic he most important of ut ways to prevent	materials in the factory liseases caused by the natur and control industry risks		ethods	
9-	Teaching and L	earning Strategies			
Strat	egy	 Teaching st Education s planning. Education s Education s Education s discussion. Education s 	e education strategy. rategy brainstorming trategy collaborative trategy real-time fee trategy notes series. trategy by exchangin trategy by presenting trategy through train scientific development	concej dback ng opini g inforr ning and	ons and nation.
		10- Course Struc	cture		
Evaluation	Learning	Unit or subject name	Required Learning	Hours	weeks
method	-Cooperative Learning Strategy. Brainstorming Education Strategy. -Cooperative Concept Mapping Education Strategy. Real-Time Feedback		Outcomes 1-Enhancing motivation for learning in its various forms: internal motivation, social motivation, and achievement motivation. 2-Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress.		
Daily quizzes, oral and written exams, reports, .and discussions	Education Strategy. Observation Chain Education Strategy. Opinion Exchange and Discussion Education Strategy. Information Presentation Education Strategy. Information Education Strategy. Training and Presenting Scientific Updates Education Strategy.	Introduction, back ground &development	 progress. 3-Creating opportunities to implement collaborative curriculum planning and to foster cooperation among faculty members to identify gaps and repetitions. 4-Assisting students in ensuring that curriculum and educational environment-related decisions are sound. 5-Promoting a philosophy of continuous monitoring and improvement. 6-Helping students to affirm accountability and ensure the quality of academic programs. 	2	1-2
and written exams, reports,	Education Strategy. Observation Chain Education Strategy. Opinion Exchange and Discussion Education Strategy. Information Presentation Education Strategy. Training and Presenting Scientific Updates Education		 3-Creating opportunities to implement collaborative curriculum planning and to foster cooperation among faculty members to identify gaps and repetitions. 4-Assisting students in ensuring that curriculum and educational environment-related decisions are sound. 5-Promoting a philosophy of continuous monitoring and improvement. 6-Helping students to affirm accountability and ensure the 	2	1-2

=	=	Biological and psychological hazard	=	2	8-9
=	=	Effect of work on health	=	2	10-11
=	=	Treatment & first aid	=	2	12-13
=	=	Occupational health services unit: Objectives , budget and personal	=	2	14-16
=	=	Preliminary , sporadic & other occupational, Accidents	=	2	17-18
=	=	Occupational safety	=	2	19-20
=	=	Occupational surveillance	=	2	21
=	=	Hazard surveillance	=	2	22-24
=	=	Women workers	=	2	25-26
=	=	Women's occupational health problems	=	2	27-28
=	=	Health hazard of child worker	=	2	29-30
		worker			
		10-Course structure (pra	ctical)		
Evaluation	Learning	Unit or subject name	Required Learning	Hours	weeks
method	method		Outcomes		
Daily quizzes, oral and written exams, reports, and discussions		Occupational safety	 I.Enhancing motivation for learning in its various forms: internal motivation, social motivation, and achievement motivation. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. Creating opportunities to implement collaborative curriculum planning and to foster cooperation among faculty members to identify gaps and repetitions. Assisting students in ensuring that curriculum and educational environment-related decisions are sound. Promoting a philosophy of 	2	1
	Updates Education Strategy.		continuous monitoring and improvement. 6. Helping students to affirm accountability and ensure the quality of academic programs.		
=	-	Low and legislation	improvement. 6. Helping students to affirm	2	2-4
=	Strategy.	Low and legislation Safety organization	improvement. 6. Helping students to affirm accountability and ensure the quality of academic programs.	2 2	<u>2-4</u> 5
	Strategy. =		improvement. 6. Helping students to affirm accountability and ensure the quality of academic programs. =		
=	Strategy. = =	Safety organization Types of inspections Injury report	improvement. 6. Helping students to affirm accountability and ensure the quality of academic programs. = =	2	5
=	Strategy. = = = =	Safety organization Types of inspections	improvement. 6. Helping students to affirm accountability and ensure the quality of academic programs. = = =	2 2	5 7-6
= = =	Strategy. = = = = =	Safety organization Types of inspections Injury report Occupational health: primary &periodic medical	improvement. 6. Helping students to affirm accountability and ensure the quality of academic programs.	2 2 2	5 7-6 10-9-8
= = =	Strategy. = = = = = =	Safety organization Types of inspections Injury report Occupational health: primary &periodic medical examination	improvement. 6. Helping students to affirm accountability and ensure the quality of academic programs. = = = = = = =	2 2 2 2	5 7-6 10-9-8 12-11

equipment, head protection, By e protectionIn==Body protection, Protective equipment.=219-18==Investigation of accidents according to LLO value=221-20==Noccupational design: sampling, environmental=222-24==Relation between measurements & threshold=225-28==Relation between measurements & threshold=229-30==Ergonomics: function, display, control design, and environmental factors=229-30III- Course EvaluationDistributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etcI2- Learning and Teaching ResourcesRequired textbooks (curricular books, if any)Amon references (sources)journal of accupational meth and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44Main references (sources)journal safety academiaCoupational safety academiaiournal safety nonces subjects)Google scholar									
=Body protection, Hands protection, Protective equipment.=219-18==Investigation of accidents according to ILO value=221-20==Newstigation of accidents according to ILO value=222-20==Occupational design: sampling, environmental monitoring=222-24==Relation between measurements & threshold limit: value TLV=222-28==Ergonomics: function, display, control design, and environmental factors=229-30Elegonomics: function, display, control design, and environmental factors=229-30II- Course EvaluationDistributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etcI2- Learning and Teaching ResourcesRequired textbooks (curricular books, if any)Required textbooks (curricular books, if any)Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Review. 2012 Sep:14(3):328-44.·Main references (sources)Canadot occupational adention iournal of occupational adention iournal of occupational adention iournal of cocupational adention iournal of adentionCourse EvaluationCourse EvaluationOccupational descriptionOccupational descriptionOccu									
==protection, Protective equipment.=219-18==Investigation of accidents according to ILO value=221-20==Occupational design: asampling, environmental monitoring=222-24==Relation between measurements & threshold=222-28==Relation between measurements & threshold=225-28==Ergonomics: function, display, control design, and environmental factors=229-3011- Course EvaluationDistributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc12- Learning and Teaching ResourcesRequired textbooks (curricular books, if any)Required textbooks (curricular books, if any)journal of occupational and environmental medicine journal of occupational health and safetyRecommended books and references (scientif journals, reports)Occupational safety academia									
Image: Second							10.10		
= = Investigation of accidents according to ILO value = 2 21-20 = = Occupational design: sampling, environmental monitoring = 2 22-24 = = Melation between measurements & threshold limit: value TLV = 2 25-28 = = Ergonomics: function, display, control design, and environmental factors = 2 29-30 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 I1- 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 I2- Learning and Teaching Resources Required textbooks (curricular books, if any) Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managemen Reviews. 2012 Sep;14(3):328-44. .Main references (sources) journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia	=	=			=	2	19-18		
- = according to ILO value = 2 21-20 = = Occupational design: sampling, environmental monitoring = 2 22-24 = = Relation between measurements & threshold = 2 25-28 = = Ergonomics: function, display, control design, and environmental factors = 2 29-30 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 2 29-30 Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. Manageme Reviews. 2012 Sep;14(3):328-44. -Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Ccupational and environmental medicine journal of occupational health and safety Recommended books and references (scientit journals, reports) Occupational safety academia Occupational safety academia									
according to ILO value Occupational design: 2 22-24 0ccupational design: sampling, environmental = 2 22-24 according in Relation between Relation between = 2 25-28 according init: value TLV = 2 29-30 according 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 2 29-30 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 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Action of cocupational and environmental medicine journal of occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. -Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientit journals, reports) Occupational safety academia	=				=	2	21-20		
= = sampling, environmental monitoring = 2 22-24 = Relation between measurements & threshold limit: value TLV = 2 25-28 = = Ergonomics: function, display, control design, and environmental factors = 2 29-30 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 11- 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 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. .Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia	-								
Image: Second	_					0	22.24		
= = Relation between measurements & threshold limit: value TLV = 2 25-28 = = Ergonomics: function, display, control design, and environmental factors = 2 29-30 Ill- 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 Ill- Course Evaluation Required textbooks (curricular books, if any) Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety manageme in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. .Main references (sources) journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia	=	=			=	2	22-24		
= = measurements & threshold limit: value TLV = 2 25-28 = = Ergonomics: function, display, control design, and environmental factors = 2 29-30 Il- 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 I2- Learning and Teaching Resources Required textbooks (curricular books, if any) Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. .Main references (sources) journal of occupational and environmental medicine journal of occupational and environmental medicine journal of occupational safety academia Recommended books and references (scientifi journals, reports) Occupational safety academia									
Image:	_					0	25.20		
= = Ergonomics: function, display, control design, and environmental factors = 2 29-30 11- 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 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. .Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia	=	=			=	2	25-28		
= = display, control design, and environmental factors = 2 29-30 11- 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 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Adam references (sources) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia									
environmental factors environmental factors 11- 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 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Addin references (sources) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia	_					2	20.20		
11- 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 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. -Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientifi journals, reports) Occupational safety academia	_	=			=	2	29-30		
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 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Anin references (sources) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia									
preparation, daily oral, monthly, or written exams, reports etc 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. -Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia			11- Cou	se Evalu	ation				
preparation, daily oral, monthly, or written exams, reports etc 12- Learning and Teaching Resources Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. -Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia	Distributing	g the score out of	100 according t	o the task	s assigned to the studer	it such a	as dailv		
12- Learning and Teaching Resources Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. .Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia		5	0		0		J		
Required textbooks (curricular books, if any) Zanko M, Dawson P. Occupational health and safety managem in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. -Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia									
Required textbooks (curricular books, if any) in organizations: A review. International Journal of Manageme Reviews. 2012 Sep;14(3):328-44. -Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia		12-	- Learning and		•				
.Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia									
-Main references (sources) journal of occupational and environmental medicine journal of occupational health and safety Recommended books and references (scientif journals, reports) Occupational safety academia	Required te	xtbooks (curricula	r books, if any)			Journal of	f Manageme		
Recommended books and references (scientif journals, reports) Occupational safety academia				Reviews. 2012 Sep;14(3):328-44.					
Recommended books and references (scientif journals, reports) Occupational safety academia	.Main refere	ences (sources)		journal of occupational and environmental medicine					
journals, reports) Occupational safety academia		()		5 1					
journals, reports) Occupational safety academia	Recommen	ded books and ret	ferences (scientif						
journals, reports)									
Electronic References, Websites Google scholar	journals, rep	ports…)		occupational safety academia					
Electronic References, Websites Google scholar		,							
Electronic References, Websites Google scholar									
Electronic References, Websites Google scholar									
Electronic References, Websites Google scholar									
	Elec	tronic References,	Websites		Google scholar				

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

Course Description Form

1- Course name

Occupational Safety

2- Course Code : four

3- Semester / Year: 29/2/2024

4- Description Preparation Date:

5- Available Attendance Forms:

6- Number of Credit Hours (Total) / Number of Units (Total)

7- Course administrator's name (mention all, if more than one name) Lecturer: Mohammed Malih Radhi <u>Mohammed.amri92@gmail.com</u>

		8- Course Objecti	ves		
of maintainin Specific Obje 1- Learn how 2- Identify th 3- Learn abo	ng them ective: The student v to deal with toxic ne most important o ut ways to prevent	materials in the factory liseases caused by the natur and control industry risks		ethods	
9-	Teaching and L	earning Strategies			
Strat	egy	 Teaching st Education s planning. Education s Education s Education s discussion. Education s 	e education strategy. rategy brainstorming strategy collaborative strategy real-time fee strategy notes series. strategy by exchanging strategy by presenting strategy through train scientific development	concej dback ng opini g inforr ning and	ons and nation.
		10- Course Struc	cture		
Evaluation	Learning	Unit or subject name	Required Learning	Hours	weeks
method Daily quizzes, oral and written exams, reports, .and discussions	-Cooperative Learning Strategy. Brainstorming Education Strategy. -Cooperative Concept Mapping Education Strategy. Real-Time Feedback Education Strategy. Observation Chain Education Strategy. Opinion Exchange and Discussion Education Strategy. Information Presentation Education Strategy. Information Presentation Education Strategy. Training and Presenting Scientific	Introduction, back ground &development	Outcomes 1-Enhancing motivation for learning in its various forms: internal motivation, social motivation, and achievement motivation. 2-Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3-Creating opportunities to implement collaborative curriculum planning and to foster cooperation among faculty members to identify gaps and repetitions. 4-Assisting students in ensuring that curriculum and educational environment-related decisions are sound. 5-Promoting a philosophy of continuous monitoring and	2	1-2
	Updates Education Strategy.		improvement. 6-Helping students to affirm accountability and ensure the quality of academic programs.		
=		Occupational health & scope & objectives	6-Helping students to affirm accountability and ensure the	2	3-5

=	=	Biological and psychological hazard	=	2	8-9
=	=	Effect of work on health	=	2	10-11
=	=	Treatment & first aid	=	2	12-13
=	=	Occupational health services unit: Objectives , budget and personal	=	2	14-16
=	=	Preliminary , sporadic & other occupational, Accidents	=	2	17-18
=	=	Occupational safety	=	2	19-20
=	=	Occupational surveillance	=	2	21
=	=	Hazard surveillance	=	2	22-24
=	=	Women workers	=	2	25-26
=	=	Women's occupational health problems	=	2	27-28
=	=	Health hazard of child worker	=	2	29-30
	<u> </u>	worker			
		10-Course structure (pra	ctical)		
Evaluation	Learning	Unit or subject name	Required Learning	Hours	weeks
method	method		Outcomes		
Daily quizzes, oral and written exams, reports, and discussions	-Cooperative Learning Strategy. -Brainstorming Education Strategy. -Cooperative Concept Mapping Education Strategy. -Real-Time Feedback Education Strategy. -Observation Chain Education Strategy. -Opinion Exchange and Discussion Education Strategy. -Information Presentation Education Strategy. -Training and Presenting Scientific Updates Education Strategy.	Occupational safety	 1.Enhancing motivation for learning in its various forms: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Creating opportunities to implement collaborative curriculum planning and to foster cooperation among faculty members to identify gaps and repetitions. 4. Assisting students in ensuring that curriculum and educational environment-related decisions are sound. 5. Promoting a philosophy of continuous monitoring and improvement. 6. Helping students to affirm accountability and ensure the 	2	1
=	=	Low and legislation	quality of academic programs.	2	2-4
=	=	Low and legislation Safety organization	quality of academic programs.	2 2	2-4
			quality of academic programs.		
=	=	Safety organization Types of inspections Injury report	quality of academic programs.	2	5
=	=	Safety organization Types of inspections	quality of academic programs. = = = =	2 2	5 7-6
= = =	= = =	Safety organization Types of inspections Injury report Occupational health: primary &periodic medical	quality of academic programs.	2 2 2	5 7-6 10-9-8
	= = = =	Safety organization Types of inspections Injury report Occupational health: primary &periodic medical examination	quality of academic programs.	2 2 2 2	5 7-6 10-9-8 12-11

		equipment, head p					
		Eye protect					
		Body protection			_		
=	=	protection, Pro		=	2	19-18	
		equipmer					
=	=	Investigation of		=	2	21-20	
	_	according to IL		_	_		
		Occupational			_		
=	=	sampling, enviro		=	2	22-24	
		monitorir					
		Relation bet					
=	=	measurements &		=	2	25-28	
		limit: value					
		Ergonomics: fu					
=	=	display, control d	-	=	2	29-30	
		environmental	factors				
		11- Cou	se Evalu	ation			
Distributing	o the score out of	100 according t	o the task	s assigned to the studer	t such a	as dailv	
Distributing	5	0		ten exams, reports et		is duriy	
					L		
	12-	Learning and	Teachin	g Resources			
				Dawson P. Occupational health			
Required te	xtbooks (curricula	r books, if any)	in organizations: A review. International Journal of Manager				
	Υ.	,	Reviews. 2012 Sep;14(3):328-44.				
Main refere	ences (sources)		journal of occupational and environmental medicine				
			5	cupational health and safety			
				-			
Recommen	ded books and ref	erences (scientif					
iournolo ror	oorto)	·	Occupational	safety academia			
journals, rep	Jons)						
Elec	tronic References,	Websites		Google scholar			
	,						



جهاز الإشراف والتقويم العلمي دائرة ضمان الجودة والاعتماد الأكاديمي قسم الاعتماد

وزارة التعليم العالي والبحث العلمي

دليل وصف المقرر الدراسي

2024

Course description form

1- Course Name: Environmental hea

2- Course co

3- Semester/Year: Second academic y

4- Date this description was prepared: 29-2-20

5- Available forms of attendance:

6- Number of study hours (total)/number of units (total) 6/4

_		7- Name of	of the co	urse	administ	rator	
_		Assist. Lec. Sarah Al 8-					
	3.	Objectives of the study subject G The student will 1. Basic principles of the environme 2. The basic components of the ecosystem, livi The student will 1. The aerobic ecosystem and its na 2. The aquatic ecosystem and the most important general components The terrestrial ecosystem, the cycle of elements in nature, and methods of Types of environmental pollutants and their impact of	be able to ent and eco ng and no Specia be able to tural pher of the wat of energy t) kn)syst n-liv ll go) kn nom er b rans	Objectiv study	es of y subj	
_					The	strate	
		Cooperative education	n strate				
		Teaching strategy brai	nstormi				
		Education strategy collaborative concep	t plannii				
		Education strategy real-time	e feedba				
		Education strategy no	otes seri				
		Education strategy by exchanging opinions and o	liscussi				
		Education strategy by presenting in					
g me		ation strategy through training and presenting scientific devenues Name of the unit or topic	elopmer Requi	red	hours	The	
, me	liou	Tunk of the unit of topic	learn	ing	(the theory)	week	
n stra	gy.	Introduction to ecology and ecosystems, basic concepts about environment	1 .Raising	g the el of	(licoly)		
nstorr	ing.		motivation learning i	n for			
t planı	ing.		various ty				
e feed	ack		motiva				
otes se	ies.		motivation, achiever	and			
discus	lon.		motiva				
nforma velopm	ion. nts.		.2Encoura self-directed indepen	and			

Ī

		learning, where	
		students can take responsibility for	
		their studies and	
		have the ability	
		to measure their	
		academic	
		progress.	
		.3Creating	
		opportunities to implement a	
		collective	
		planning	
		approach to the	
		curriculum, and	
		for cooperation	
		among faculty	
		members to identify gaps and	
		repetitions.	
		repetitions.	
		.4Helping the	
		student to ensure	
		that decisions	
		related to the curricula and	
		educational	
		environment are	
		rational.	
		.5Promoting the	
		philosophy of	
		follow-up and continuous	
		improvement.	
		improvement.	
		6. Helping the	
		student to ensure	
		accountability	
		and ensure the	
		quality of academic	
		programs.	
	Definition of Biosphere, hydrology, Atmosphere, Lithosphere, and		
	heir components Food chain and food webs ,natural life cycles		
I	Energy flow in ecosystem and trophic levels.		
	Basic concepts about pollution		
	- Natural of pollution		
	- General characteristics of pollution		
	□ Synergistic action □ Bioaccumulation		
	□ Primary and second pollutants.		
	General characteristics of source of pollution		
	Natural and anthropogenic		
	Pointer diffuse source		
2	Stationary or mobile source Atmospheric ozone layer depletion		
A	Acid rain source, direct and indirect consequence of acid rain		
Ś	Stratosphere ozone layer depletion \Box		
	Water pollution		1
	-Thermal pollution		
	-Toxic metal pollution		
1	Nitrate, phosphate and organic waste -		
	Types and source of solid waste, control of solid waste and recycling		
	Radioactive wastes		
F			
	Voice mellution		
	Noise pollution		
	Noise pollution Environmental health: definition, scope of environmental health		

	.type of environment			
	Air pollution : Indoor air pollution -			
	Outdoor air pollution -			
	Global warming .Control measure -			
_	Green house gases -			
	Water pollution and the preparation to safe drinking water: -Source of drinking water			
	-Health hazard			
_	.Water supplies purification methods - Excreta disposal & sewage treatment			
_	Environmental and food safety			
	.Food borne illness			
_	.Food preservation Housing environmental and their effects on human health			
_				
	Solid waste management			
	Insect and rodent control			
	Electromagnetic radiation, ill effect of irridation			
	Land use planning including smart growth			
	Childhood lead poisoning prevention			
_	Water recreation illness			
_				
	Noise pollution, auditory and non auditory effects			
	.Body art and their biological factors in disease transmission			
	Second: 10- Structure	e of the (pr	actical) co	ourse
_				
ne hod	Name of the unit or topic	Required	hours	The
ne hod		Required learning	hours	The
ne hod		Required	hours (the	The
ne hod	Name of the unit or topic Introduction to Physical and chemical properties of water	Required learning outcomes	hours	The
	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water	Required learning outcomes	hours (the	The
ora istorm	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples	Required learning outcomes .1Raising the level of motivation for learning	hours (the	The
	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples	Required learning outcomes .1Raising the level of motivation	hours (the	The
ora istorm	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal	hours (the	The
ora istorm cej : planr	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social	hours (the	The
ora nstorm cej : planr tin e feedl y i ptes se	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation,	hours (the	The
ora nstorm cej : planr tin e feedl y i otes se nd liscuss	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement	hours (the	The
ora nstorm cej : planr tin e feedl y i ptes se	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and	hours (the	The
ora nstorm cej : planr tin e feedl y i otes se nd liscuss	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2.	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging	hours (the	The
ora instorm cej i planm tin e feedl y i otes se nd liscuss g i forma	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning,	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility for their studies and	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Creating	hours (the	The
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Creating opportunities to implement	hours (the	The week
pra pstorm cej : plann tin e feedl y i ptes se nd liscuss g i forma d j esenta	Name of the unit or topic Introduction to Physical and chemical properties of water -Method of collecting samples of drinking water and river water -Types of samples -Grab or catch samples - Composite samples	Required learning outcomes .1Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Creating opportunities	hours (the	The

	the		
	curriculum, and for		
	cooperation		
	among faculty		
	members to		
	identify gaps and		
	repetitions.		
	4. Helping		
	the student to ensure that		
	decisions		
	related to the curricula and		
	educational		
	environment are rational.		
	5 Durantin -		
	5. Promoting the		
	philosophy of follow-up		
	and		
	continuous improvement.		
	 Helping the student to 		
	ensure the		
	quality of academic		
	programs.		
Samples preservation and storing samples			-
-Volume of samples			
 -Concentration methods of samples Physical properties of water			
-Temperature			
- PH			
Physical properties			
-Total dissolved solids			
- Suspended solids			
Physical properties			
- Color			
- Taste			
- odor			
Physical properties			
- Conductivity			
- Turbidity			
 Chamical gran article of motor			
Chemical properties of water - Total Hardness			
- Mg hardness - Ca hardness			
 Chemical properties			
- Nitrate			
- Nitrite			
Trune			
Chemical properties of water			
- Phosphate			
Chemical properties			
		I	J

	Compound chlorine	
_	- Free chlorine	 10
	Environmental effects of algae on water body	12
	-Types of algae	
	-Sampling of algae	
	- Eutrophication phenomena(training visit)	
	Purification of drinking water (training visit)	14
	-Physical treatment	
	-Chemical treatment	
	- Biological treatment	
	Water pollution	
	- Water quality parameters of microbial water analysis	
	- Sampling of water for microbial test	
	Samples preservation and storing samples	
	-Volume of samtples	
	-Concentration methods of samples	
	Determination of	
	-dissolved oxygen (DO)	
	- Chemical oxygen demand (COD)	
	Determination of biological oxygen	
	demand (BOD5) for	
	- Drinking water	
	- River water	
	- Sewage water	
	Types of indicator microorganisms	
	- Quantitative detection of total coliform bacteria	
	Membrane filtration methods	
	Rapid methods in microbiological water analysis	
	Rapid methods in incroorological water analysis	
	Culturation methods of water	
	-Drinking water	
	-Sewage water	
	- Drinking water	
	Soil pollution by	2
	-oil	
	-heavy metals	
	-Fertilizer	
	- pesticides	
	Waste water treatment (training visit)	
	waste water treatment (training visit)	
	A :	
	Air pollution	
1	- Analysis of particulate matter in air	

	Air pol	
	- Humidity	
	- CO2 concentration in air as greenhouse	-
	Air polluti	-
		Noise d rain
		Dzone
		2. Course evaluation
g to tł	e tasks assigned to the student, such as daily preparation, daily, oral,	
		3. Learning and teaching resources
		Required textbooks (methodolog
ıdam	ntal of environment second edition" (2018), Pranav kumar, Former	Main references (our
-	partment of Biotechnology, Jamia Malila Islamia, New Delhi, India&Usha	
	onmental Sciences, Jawaharlal Nehru University (JNU), New Delhi, India	
nmen	al Biology (2018) Matthew R. Fisher, Editor OpenStax, Kamala Doršner,	
	Alexandra Geddes, Tom Theis, and Jonathan Tomkin	
ulty,C	epartment of Biotechnology,Jamia Malila Islamia,New Delhi, India&Usha	
Envi	onmental Sciences, Jawaharlal Nehru University (JNU), New Delhi, India	
	• Environmental health (book)	Recommended supporting books
	• Risk assessment for environmental health (book)	and references (scientific journals,
	• Handbook of Environmental Health, Two Volume Set	reports)
	By Herman Koren, Michael S. Bisesi	And websites
	lealth and Occupational Health & Safety By Samuel Obura Afubwa	And websites
	ents", Creating Healthy and Sustainable Buildings, Cham: Springer	
	78-3-030-19412-3_2, ISBN 978-3-030-19411-6, S2CID 190160283.	
•	https://en.m.wikipedia.org/wiki/Environmental health#cite ref-3	
	 <u>https://academic.oup.com/book/35585/chapter-</u> 	
tice%	20is%20concerned,can%20potentially%20affect%20human%20he	
	alth.	
lleng	s and research needs for U.S. Health Departments. Environ Health	
	Perspect. 2019;127:125001.	
pe 1.	An overview of practice in the 1990s. WHO Reg Publ Eur Ser. 1997	
alth C	ntent to Medical School Curricula". AAMC. Retrieved 2021-08-02.	
uture	of Environmental Medicine in Environmental Health Perspectives:	
6. do	:10.1289/ehp.113-1280414. ISSN 0091-6765. PMC 1280414. PMID	
	16140601.	
bean	nvironment Agency". www.eea.europa.eu. Retrieved 2021-08-02.	