

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



Academic Program Description

2024/2025

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: Bachelor

Final Certificate Name: Bachelor in Community Health Techniques

Academic System: Semester

Description Preparation Date: 16-9-2024

File Completion Date: 17-02-2025

Signature:

Head of Department Name:

Assist Prof. Dr. Fulath A.R. Muhsin

Date: / / 2025

Signature:

Scientific Associate Name:

Assist Prof. Dr. Raad A. Sayel

Date: / / 2025



The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: / / 2025

Signature:

[Handwritten signature]

Approval of the Dean

Prof. Dr. Angham J. Mohammed Ali

1. Program Vision

The Department of Community Health Technologies is to be a pioneering technical educational institution in providing high-quality programs inherent in the development of scientific knowledge and technical skills in various countries of the world. The Department of Community Health: The department aims to prepare technical staff working in the fields of occupational health and safety, health inspection and control, and the implementation of primary health care programs and campaigns. Health Awareness.

2. Program Mission

Embodying the ethics of technical education by providing high-quality technical education that seeks to develop human knowledge and skills that are compatible with the changes occurring in the environment and society.

3. Program Objectives

- The program aims to prepare technical personnel working in the fields of occupational health and safety, health inspection and control, and implementing primary health care programs and health awareness campaigns.
- Reaching international standards in medical and health technical education.
- Accommodating the development taking place in the field of work by creating medical and health technical departments that keep pace with the change in therapeutic and preventive methods.
- Preparing a middle cadre qualified in knowledge and skills to deal with the technical development occurring in the field of work and the global environment. Providing the ideal environment as much as possible to achieve the optimal learning state.
- Emphasizing self-respect and respect for others.
- Continuously keeping up with and learning about the development taking place in various branches of medical and health specialization to enhance skills. Emphasizing respect for solid university traditions and sanctifying the profession and its etiquette.
- Strengthening relationships in the environment and the work field.
- Diligently striving to maintain positive relations with corresponding colleges

Encouraging students to participate in student activities and organizations for the purpose of developing leadership skills, and emphasizing the spirit of teamwork and working as one team.

4. Program Accreditation

Nothing

5. Other external influences

- Ministry of Higher education and Scientific Research
- Ministry of Health

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	8 (English Language Human rights and Democracy Arabic Language Computer Principles Arabic Language Computer Applications Baath Party Crimes in Iraq Computer Applications)	19	7.5%	
College Requirements	14 (General Anatomy 1 General Anatomy 2 Pharmacology 1 Pharmacology 2 Medical Entomology Chronic diseases 1 Health Management Chronic diseases 2 Medical Microbiology 1 Medical Microbiology 2 Medical Entomology Chronic diseases 1 Health Management Chronic diseases 2)	72	28.3%	
Department Requirements	29 (Techniques for Medical Device Principles of community health 1 Clinical Chemistry 1 Physiology 1 Principles of community health 2 Clinical Chemistry 2 Physiology 2 Techniques for Medical Device Nutrition 1 Communicable	163	64.2%	

	diseases 1 Epidemiology 1 Environmental Health 1 Nutrition 2 Communicable diseases 2 Epidemiology 2 Biostatistics Environmental Health 2 Health laws and supervision Environmental Pollution Advance Vital Statistics 1 Toxicology Methodology Health Survey Advance Vital Statistics 2 Community Health Services Communicable diseases Occupational health Environmental Health Health education and health management)			
Summer Training	The second stage - the third stage, the third stage - the fourth stage			
Other	Scientific and field visits to factories and relevant health institutions			

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
First Year	101	First Course	16 (weekly)	24 (weekly)

First Year	102	Second Course	13 (weekly)	22 (weekly)
Second Year	201	First Course	13 (weekly)	20 weekly
Second Year	202	Second Course	14 (weekly)	20 (weekly)
Third Year	301	First Course	11 (weekly)	22 (weekly)
Third Year	302	Second Course	13 (weekly)	20 (weekly)
Fourth Year	40	Year	9 (weekly)	14 (weekly)

8. Expected learning outcomes of the program

Knowledge	
• Make use of the right technology for managing and providing healthcare. • Engage in culturally competent interactions with people from different backgrounds. • Effectively manage financial and human resources to guarantee high-quality medical treatment. • Work within the bounds of the law and ethics when providing healthcare. • Include up-to-date evidence-based procedures in a medical setting. • Effectively communicate with patients, their families, and other members of the interprofessional team. • Lead interprofessional practice and education to raise the standard of patient safety and healthcare. • Create useful applications for public, community, and individual health.	Implement the knowledge provided to him, by following up with trainers specialized in the same field, through achievement exams, surprise tests, and feedback diseases.
Skills	
B1 - The ability to understand and analyze matters related to all health services.	• Apply health service skills
B2 - The ability to build a health program in line with the programs that have been studied.	• Apply and schedule vaccine skills • Applying the skills of health programs
Ethics	
Dealing with patients without discrimination	
Dealing with managers and colleagues in accordance with the Code of Professional Conduct.	

9. Teaching and Learning Strategies

- Cooperative education strategies. (It forms groups of 3 or 4 students to solve a specific assignment or problem)
- Brainstorming strategy. (A state of mental excitement to make the student think about all

possible possibilities.)

- Case study.
- Discussion strategy
- Educational bag strategy

10. Evaluation methods

1. Solving assignments for my class and extracurriculars
2. Surprise exams.
3. Scientific reports and seminars.
4. Final achievement exams.
5. Evaluating practical skills by conducting laboratory experiments

11. Faculty						
Faculty Members						
Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor	Biology	Medical Microbiology			1	-
Professor	Biology	Medical Physiology			1	-
Assistant Professor	Law	law			1	-
Assistant Professor	Veterinary Medicine	Pharmacology and Toxicology			1	-
Assistant Professor	Biology	Immunology			1	-
Assistant Professor	Biology	Medical Microbiology			1	-
Assistant Professor	Nursing	Community Health Nursing			1	-
Lecturer	Arabic Language	Arabic Language			2	-

Lecturer	Law	Law			2	-
Lecturer	Biology	Medical virology			1	-
Lecturer	Biology	Microbiology			1	-
Lecturer	Biology	mycology			1	-
Lecturer	Computer Science	Computer Science			1	-
Lecturer assistant	Medical Biotechnology	Medical Biotechnology			1	-
Lecturer assistant	Biology	Biology			1	-
Lecturer assistant	Mathematics	Mathematics Statistics			1	-
Lecturer assistant	Chemistry	Chemistry			1	-
Lecturer assistant	English	English			1	-
Lecturer assistant	Community Health Techniques	Community Health Techniques			2	-

Professional Development

Mentoring new faculty members

1. Informing them of the directives issued by higher authorities through:

a. Section Council.

B. Social media programs.

C. Consultative meetings.

Professional development of faculty members

1. Involving professors in specialized courses such as (teaching methods and training courses).

2. Assigning faculty members to hold specialized seminars and courses.

3. Working to send faculty members to participate in development courses in the institutions of the Ministry of Health

12. Acceptance Criterion

(Developing regulations related to admission to the college or institute, whether central admission or others mentioned)

The approved admission system is central admission

13. The most important sources of information about the program

Remember briefly.

- the library
- Information network/Internet
- Experiences of Arab and international universities
- educational subjects

14. Program Development Plan

Doctorate program planned to updated during the few years later

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First year	CHD-1-101	First course	Basic 50 % and optional 50%	✓						✓					✓
	CHD-1-102	Second course	Basic 50 % and optional 50%	✓						✓					✓
Second Year	CHD-2-201	First course	Basic 57 % and optional 43%	✓					✓					✓	
	CHD-2-202	Second course	Basic 71% and optional 29%	✓					✓					✓	
Third Year	CHD-3-301	First course	Basic 50% and optional 50%	✓				✓						✓	
	CHD-3-302	Second course	Basic 57% and optional 43%	✓				✓					✓		
Fourth Year	CHD-4-401	First course	Basic 86% and optional 14%	✓				✓					✓		
	CHD-4-401	Second course	Basic 71 % and optional 29%	✓				✓				✓			

Program Skills Outline

				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic/ optional/ general	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First Year	CHD-1-101-1	Techniques for Medical Device	Basic	✓				✓							✓
	CHD-1-101-2	Medical Microbiology 1	Optional	✓				✓							✓
	CHD-1-101-3	Principles of community health 1	Basic	✓				✓				✓			
	CHD-1-101-4	Clinical Chemistry 1	Basic	✓				✓							✓
	CHD-1-101-5	General Anatomy 1	Optional	✓							✓				✓
	CHD-1-101-6	Physiology 1	Basic	✓				✓							✓
	CHD-1-101-7	English Language	General	✓						✓					✓
	CHD-1-101-8	Human rights and Democracy	General	✓									✓		
	CHD-1-102-1	Medical Microbiology 2	optional	✓				✓							✓
	CHD-1-102-2	Principles of community health 2	Basic	✓				✓							✓
	CHD-1-102-3	Clinical Chemistry 2	Basic	✓				✓							✓
	CHD-1-102-4	General Anatomy 2	Optional	✓							✓				✓

	CHD-1-102-5	Physiology 2	Basic	✓				✓						✓
	CHD-1-102-6	Arabic Language	General	✓								✓		
	CHD-1-102-7	Computer Principles	General	✓				✓						
Second year	CHD-2-201-1	Nutrition 1	Basic	✓						✓		✓		
	CHD-2-201-2	Communicable diseases 1	Basic	✓					✓			✓		
	CHD-2-201-3	Pharmacology 1	Basic	✓				✓				✓		
	CHD-2-201-4	Epidemiology 1	Basic	✓							✓			
	CHD-2-201-5	Environmental Health 1	Basic	✓				✓				✓		
	CHD-2-201-6	Computer Applications	General	✓				✓						
	CHD-2-201-7	Baath Party Crimes in Iraq	General	✓								✓		
	CHD-2-202-1	Nutrition 2	Basic	✓						✓		✓		
	CHD-2-202-2	Communicable diseases 2	Basic	✓					✓			✓		
	CHD-2-202-3	Pharmacology 2	Optional	✓				✓				✓		
	CHD-2-202-4	Epidemiology 2	Basic	✓							✓			✓
	CHD-2-202-5	Biostatistics	Basic	✓				✓						✓
	CHD-2-202-6	Environmental Health 2	Basic	✓								✓		
	CHD-2-202-7	Arabic Language	General	✓								✓		
Third Year	CHD-3-301-1	Health laws and supervision	Basic	✓							✓	✓		
	CHD-3-301-2	Environmental Pollution	Basic	✓				✓					✓	

	CHD-3-301-3	Medical Entomology	Optional	✓					✓				✓
	CHD-3-301-4	Advance Vital Statistics 1	Basic	✓				✓					✓
	CHD-3-301-5	Chronic diseases 1	Optional	✓						✓	✓		
	CHD-3-301-6	Computer Applications 1	General	✓				✓					
	CHD-3-302-1	Toxicology	Basic	✓				✓				✓	
	CHD-3-302-2	Methodology	Basic	✓				✓			✓		
	CHD-3-302-3	Health Survey	Basic	✓				✓			✓		
	CHD-3-302-4	Health Management	Optional	✓							✓		
	CHD-3-302-5	Advance Vital Statistics 2	Basic	✓				✓					✓
	CHD-3-302-6	Chronic diseases 2	Optional	✓							✓		
	CHD-3-302-7	Computer Applications 2	General	✓				✓					
Fourth Year	CHD-4-401-1	Community health services 1	Basic	✓				✓			✓		
	CHD-4-401-2	Occupational Health 1	Basic	✓				✓					
	CHD-4-401-3	Clinical epidemiology 1	Basic	✓				✓					
	CHD-4-401-4	Health Education	Basic	✓					✓				
	CHD-4-401-5	Non-Communicable Diseases 1	Basic	✓				✓			✓		
	CHD-4-401-6	International Health	Optional	✓							✓		

CHD-4-402-1	Community health services 2	Basic	✓				✓								
CHD-4-402-2	Occupational Health 2	Basic	✓				✓								
CHD-4-402-3	Control of Communicable Diseases	Basic	✓				✓				✓				
CHD-4-402-4	Clinical epidemiology 2	Basic	✓				✓								
CHD-4-402-5	Non-Communicable Diseases 2	Basic	✓				✓				✓				
CHD-4-402-6	Project	Optional	✓				✓				✓				
CHD-4-402-7	Professional ethics	General	✓								✓				

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Academic Course Description

2025

Course Description Form

1- Course name					
Community Health Services					
2- Course Code					
CH411					
3- Semester / Year:					
Year					
4- Description Preparation Date:					
16-9-2024					
5- Available Attendance Forms:					
Weekly					
6- Number of Credit Hours (Total) / Number of Units (Total)					
1 (theory) 5 (practical)/ 7 unit					
7- Course administrator's name (mention all, if more than one name)					
Assistant. lecturer; Zahraa Ahmed Abd zahraashebany@gmail.com					
8- Course Objectives					
General objective: Enable students to understand the basics of community health services and identify the various roles of community health systems. Specific Objectives: The student will be able to: 1. Describe the process of monitoring children's growth (weight and height). 2. Explain the relationship between nutrition and common diseases. 3. Recognize the role of breastfeeding and vaccinations in promoting health. 4. Discuss the importance of maintaining vaccine efficacy during storage and transport. 5. Interpret the causes, symptoms, and preventive measures for common diseases (e.g., diarrhea, respiratory infections). 6. Understand the importance of national and expanded vaccination programs in preventing diseases and improving public health.					
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. - Education strategy through training and presenting scientific developments.			
10- Course Structure					
Evaluation method	Learning method	Unit or subject name	Required Learning Outcomes	Hours	weeks
Daily quizzes, oral and written	Cooperative Learning Strategy. Brainstorming Education Strategy.		1-Enhancing motivation for learning in its various forms: internal motivation, social motivation, and achievement	1	1

exams, reports, and discussions	-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.	General examination of the new born & Apgar score 1	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.		
=	=	Growth monitoring, weight, length	=	1	2
=	=	Infant feeding breast, artificial, mixed, weaning food	=	1	3
=	=	Immunization, immunity, types	=	1	4
=	=	Vaccination types, immunity	=	1	5
=	=	Vaccination, general principle of vaccine	=	1	6
=	=	Cold chain in general	=	1	7
=	=	National immunization program in Iraq	=	1	8
=	=	Expanded program of immunization	=	1	9
=	=	Certain communicable diseases, general outlook	=	1	10
=	=	Acute respiratory tract infection, causes, types, classification	=	1	11
=	=	Management, prevention & control of ARI	=	1	12
=	=	Diarrhea, causes, signs & symptoms	=	1	13
=	=	Diarrhea management & prevention	=	1	14-15
=	=	ORS principles, composition, methods of health education,	=	1	16
=	=	General important problem "mal nutrition in general"	=	1	17-18
=	=	Marasmus & kwashiorkor	=	1	19-20
=	=	Iron & vit. deficiency	=	1	21
=	=	Vit. A & iodine deficiency	=	1	22
=	=	Preschool health services, growth, feeding, vaccination	=	1	23
=	=	School health services	=	1	24
=	=	Feeding program of school age group	=	1	25

=	=	Eye hygiene "trachoma control"	=	1	26
=	=	Dental health services	=	1	27
=	=	Learning disability	=	1	28
=	=	Handicapped children	=	1	29
=	=	Vital statistics	=	1	30

10-Course structure (practical)

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	General examination of the new born	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.	5	1-2
=	=	Growth monitoring, weight, length	=	5	3-4
=	=	Infant feeding	=	5	5
=	=	Immunizations	=	5	6
=	=	Vaccination types	=	5	7
=	=	Cold chain	=	5	8
=	=	National immunization program in Iraq	=	5	9-10
=	=	Certain communicable diseases	=	5	11-12
=	=	Acute respiratory tract infection ARI	=	5	13
=	=	Diarrhea	=	5	14
=	=	ORS (oral rehydration solution)	=	5	15-16
=	=	Malnutrition	=	5	17
=	=	School health services	=	5	18-19
=	=	Dental health services	=	5	20-21
=	=	Learning disability	=	5	22-24
=	=	Handicapped children	=	5	25
=	=	Handicapped children	=	5	26-28
=	=	Vital statistics	=	5	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)	Community Health Services: Principles and Practices
-Main references (sources)	Essentials of Public Health Research
Recommended books and references (scientific journals, reports...)	American Journal of Public Health BMC Public Health The Lancet Public Health
Electronic References, Websites	World Health Organization (WHO) – who.int Centers for Disease Control and Prevention (CDC) – cdc.gov Community Health Assessment Clearinghouse – health.ny.gov Google Scholar – scholar.google.com

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Academic Course Description Guide

2024/2025

Course Description Form

1. Course Name: environmental health					
2. Course Code:					
CH414					
3. Semester / Year: two semesters/ 4 th stage					
4. Description Preparation Date: 16-9-2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total) 60 hr. theory, 60 hr. practical/ 6 units					
7. Course administrator's name (mention all, if more than one name) Name: Inas Kadhim Abdulameer Email: enas.kazem.chm@atu.edu.iq					
8. Course Objectives					
Course Objectives		Giving an idea and information about the health of the environment and its relationship with humans, and developing the student's skill in knowing its types and methods of treating pollution affecting human health by performing some types of analyses, obtaining results and interpreting them to solve all environmental problems affecting human health.			
9. Teaching and Learning Strategies					
Strategy		1- Interactive lecture using the progressive presentation program 2- Use the brainstorming method by asking intellectual questions 3- Involving the student in the academic subject by presenting a seminar on recent topics related to the academic subject 4- Practical training in groups 5- Preparing printed scientific lectures on paper			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	2	definition, scope of environmental health	environmental health	A theoretical lecture using PowerPoint	Short, semester and final exams
2-3	4	indoor of pollution outdoor air pollution	Air pollution	A theoretical lecture using PowerPoint	Short, semester final exams
4-5	4	Approaches for control of toxic air pollution	Environmental of work place	A theoretical lecture using PowerPoint	Short, semester final exams
6-8	6	Source of drinking water Health hazard. Water supplies purification	Water and sewage	A theoretical lecture using PowerPoint	Short, semester final exams
9	2	Excreta disposal sewage treatment	Excreta disposal sewage treatment	A theoretical lecture using PowerPoint	Short, semester final exams
10-12	6	Food born illness. Food preservation	Environmental and food	A theoretical lecture using PowerPoint	Short, semester final exams
13	2	Housing environment	Housing environmental	A theoretical lecture using PowerPoint	Short, semester final exams
14	2	Solid waste	Solid waste	A theoretical lecture using PowerPoint	Short, semester final exams
15-16	4	Insects & rodents control	Insects & rodents control	A theoretical lecture using PowerPoint	Short, semester final exams
17	2	Environmental injury control	Environmental injury control	A theoretical lecture using PowerPoint	Short, semester final exams
18	2	-----	Electromagnetic radiation, ill effect irradiation	A theoretical lecture using PowerPoint	Short, semester final exams
19	2	-----	Environmental health rural areas	A theoretical lecture using PowerPoint	Short, semester final exams
20-23	6	-----	How to monitor environmental	A theoretical lecture using PowerPoint	Short, semester final exams
24-25	4	-----	How to measure release in an exposure	A theoretical lecture using PowerPoint	Short, semester final exams
26	2	-----	Macroscopically view environmental health	A theoretical lecture using PowerPoint	Short, semester final exams
27	2	-----	Environmental factors disease causation	A theoretical lecture using PowerPoint	Short, semester final exams
28-29	4	-----	Biological factors in disease causation	A theoretical lecture using PowerPoint	Short, semester final exams
30	2	-----	Deforestation	A theoretical lecture using PowerPoint	Short, semester final exams
Practical					

1	2		Introduction environmental health	A practical lab	Short, semester final exams
2	2		Solution, glass w analysis, type of analy with the word standard	A practical lab	Short, semester final exams
3	2		Physical analysis of water	A practical lab	Short, semester final exams
4	2		Color and turbidity	A practical lab	Short, semester final exams
5	2		Solid material in water	A practical lab	Short, semester final exams
6	2		Electrical constion	A practical lab	Short, semester final exams
7	2		Biochemical analysis (PH)	A practical lab	Short, semester final exams
8	2		Acidity	A practical lab	Short, semester final exams
9	2		Alkalinity	A practical lab	Short, semester final exams
10	2		Hard water	A practical lab	Short, semester final exams
11	2		Sulfate	A practical lab	Short, semester final exams
12-13	4		Chloride. Residue chloride	A practical lab	Short, semester final exams
14-16	4		Dissolved oxyg organic phosphate mater.	A practical lab	Short, semester final exams
17	2		Nitrogen compound	A practical lab	Short, semester final exams
18	2		Metal and their effect of main test measurement	A practical lab	Short, semester final exams
19	2		Metal analysis fla photometer	A practical lab	Short, semester final exams
20	2		Calcium and magnes measurement by titrat	A practical lab	Short, semester final exams
21	2		Biological environmet and biological indicat water organisms	A practical lab	Short, semester final exams
22	2		The biological treatm of water and their gl wear sampling and for water	A practical lab	Short, semester final exams
23	2		Bacteriological examination of water	A practical lab	Short, semester final exams
24	2		Classification of bacteria in water	A practical lab	Short, semester final exams
25	2		Total count of bacteria water	A practical lab	Short, semester final exams
26	2		Detection stepsooccus in water	A practical lab	Short, semester final exams
27-28	4		Problems of chlorofo	A practical lab	Short, semester

29-30	4		Revision	A practical lab	final exams Short, semester final exams
11.					
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)			Currently, there is no textbook. It is required provide a book that addresses the topics of the course and is entitled (Environmental Health)		
Main references (sources)			Books in : Water for Life , environmental health		
Recommended books and references (scientific journals, reports...)			1-Environmental Health: Ecological Perspectives (Paperback by Kathryn Hilgenkamp (shelved 3 times as environmental-health) 2- Exposure: Poisoned Water, Corporate Greed, and One Lawyer's Twenty-Year Battle against DuPont (ebook) by Robert Bilott		
Electronic References, Websites			1- https://www.apha.org/topics-and-issues/environmental-health 2- https://www.chinz.ac.nz/indicators/overview/what-is-environmental-health		

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Academic Program and Course Description Guide

2024/2025

Course Description Form

1- Course name
Occupational Safety
2- Course Code:Four
CH413
3- Semester / Year: 2024
4- Description Preparation Date:
16-9-2024
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 Mohammed.amri92@gmail.com

8- Course Objectives

General objective: The student gets to know the most important safety devices and methods of maintaining them

Specific Objective: The student will be able to:

- 1- Learn how to deal with toxic materials in the factory
- 2- Identify the most important diseases caused by the nature of work
- 3- Learn about ways to prevent and control industry risks

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.
- Education strategy through training and presenting scientific developments.

10- Course Structure

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.	Introduction, back ground & development	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
=	=	Occupational health & scope & objectives	=	2	3-5
=	=	Types of tasks & hazards in work place, physical, chemical	=	2	6-7

=	=	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

10-Course structure (practical)

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.	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 quality of academic programs.	2	1
=	=	Low and legislation	=	2	2-4
=	=	Safety organization	=	2	5
=	=	Types of inspections	=	2	7-6
=	=	Injury report	=	2	10-9-8
=	=	Occupational health: primary & periodic medical examination	=	2	12-11
=	=	Occupational health services	=	2	13
=	=	Occupational nursing	=	2	15-14
=	=	Personal protection	=	2	17-16

*		equipment, head protection, Eye protection			
=	=	Body protection, Hands protection, Protective equipment.	=	2	19-18
=	=	Investigation of accidents according to ILO value	=	2	21-20
=	=	Occupational design: 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

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 management in organizations: A review. International Journal of Management 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 (scientific journals, reports...)	Occupational safety academia
Electronic 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

2024/2025

Course Description Form

1- Course name
Anatomy
2- Course Code
CH115 CH124
3- Semester / Year: , , 2024
4- Description Preparation Date:
16-9-2024
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)

8- Course Objectives

General Objective:

By the end of the academic year, the student should be able to understand the general anatomy of the human body and the main functions related to organ anatomy.

Specific Objective:

The student will become acquainted with the detailed anatomy of certain body organs and their functions, both theoretically and practically.

9- Teaching and Learning Strategies

Strategy

- 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.

10- Course Structure

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.	Introduction to human anatomy: Anatomical (terms, types, surfaces, regions And surgical incision) Surface anatomy : planes and vertical lines .	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
=	=	Cell and tissue, Type of	=	2	3-5

		tissues (epithelial, connective, muscular, nervous tissues, etc.) Skeleton Anatomy (Skull) Skeleton Anatomy (Vertebral Column and thoracic cage).			
=	=	Skeleton Anatomy (Thoracic Cage) Skeleton Anatomy (pelvic, upper limb and lower limb)	=	2	6-7
=	=	Joints types, classification and functions. Joints of the Upper and Lower limb	=	2	8-9
=	=	Anatomy of muscular system (Head and Neck). Anatomy of Muscular System (Upper and Lower Limbs).	=	2	10-11
=	=	Anatomy of Muscular System (Pelvic). Blood Vessel and Blood Circulation	=	2	12-13
=	=	Anatomy of Cardiovascular System. (Definition and Classification) Anatomy of the Heart, Cardiac (Covers, Layers, Chambers and Valves) Anatomy of Digestive System (mouth, Pharynx and oesophagus)	=	2	14-16
=	=	Anatomy of Digestive System (stomach and Intestine)	=	2	17-18
=	=	Anatomy of genitourinary system and Respiratory system	=	2	19-20
=	=	Anatomy of C.N.S (Brain, spinal cord)	=	2	21
=	=	Spinal nerves	=	2	22-24
=	=	Anatomy of peripheral nervous system (cranial nervous, spinal nerves)	=	2	25-26
=	=	Anatomy of endocrine system (definition, location, connections and functions)	=	2	27-28
=	=	Lymphatic system and respiratory system	=	2	29-30

10-Course structure (practical)

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	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 independent learning, where students can take responsibility	2	1

	Education Strategy: -Observation Chain Education Strategy: -Opinion Exchange and Discussion Education Strategy: -Information Presentation Education Strategy: Training and - Presenting Scientific Updates Education Strategy		for their studies and have the ability to measure their academic progress Creating opportunities to .3 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 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)	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 (scientific journals, reports...)	Clinically oriented anatomy by MOORE 9 TH edition
Electronic References, Websites	PUBMED and NCBI

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Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department**



Academic Course Description

2024/2025

Al-Furat Al-Awsat Technical University

College of Health and Medical Techniques-Kufa

Community Health Department



Course Description Form

1. Course Name:	
(Techniques for Medical Device)	
2. Course Code:	
CH111	
3. Semester / Year:	
2024-2025	
4. Description Preparation Date:	
10/11/2024	
5. Available Attendance Forms:	
6. Number of Credit Hours (Total) / Number of Units (Total)	
6/4	
7. Course administrator's name (mention all, if more than one name)	
Name: Yadhan Najeh Taher	
Email: yaqddhan.taher@utu.edu.iq	
8. Course Objectives	
Course Objectives	General aim: The student learns about the laboratory medical devices that the student deals with during his practice life, such as various types of microscopes, spectrometers, centrifuges, incubators, ovens, and other devices. Special aim: 1- He learns about the types of light microscopes and when to operate which type, depending on the value that is to be examined. He also learns about the electron microscope and its advantages. 2- Learn about the spectrometer and its types, what the difference between a femtometer and an

photometer, what is the benefit of this device, and what are its components.

3- Learn about temperature-controlled devices, such as the incubator and the oven, their components, and the benefits of each.

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. Education strategy through training and presenting scientific developments.
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	1. Raising the level of motivation for learning of 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 a collective planning approach to the curriculum, and for cooperation among faculty members to identify gaps and	Definition; structural parts of microscope-head, base, and arm; classification of microscope; methods of uses; microscope electric lamp. Mechanical; optical; and light parts.	1. Cooperative education strategy. 2- Teaching strategy brainstorming. 3- Education strategy collaborative concept planning. 4- Education strategy real-time feedback 5- Education	Daily oral and written examinations, reports, discussions

		repetitions. 4. Helping the student to ensure that decisions related to the curricula and educational environment are rational. 5. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure accountability and ensure the quality of academic programs.		strategy notes series. 6- Education strategy by exchanging opinions and discussion. 7- Education strategy by presenting information. 8- Education strategy through training and presenting scientific Developments	
2	2	=	Definition; defect; care; classification; single vision lens; bio-focal lens and varifocal lens.		
3	2	=	Characteristic; limitation; magnification; optical tube length; focal length of the objective.		
4	2	=	Types of microscopes Dark field; phase contrast; fluorescent; electron and polarizing		

			microscope: include (definition; principal structure; uses and care of microscope for each one).		
5-6	2+2	=	Centrifuge and Types of centrifuges Definition, Theory; History; and predecessors; isolating suspensions, isotope	=	=
7	2	=	Separation Ordinary laboratory centrifuge; micro- hematocrit centrifuge; Classification tube; of centrifuge; uses of the laboratory centrifuge tube	=	=
8-10	2+2+2	=	Sterilization equipment's 1. Introduction of sterilization; 2. Sterilization methods in diagram. a. physical method (heat, radiation, filtration sterilization); b. chemical method- disinfection, antiseptic; 3. Mechanism of sterilization. Temperature Control instruments- Include-water bath; dry oven; incubator and autoclave; definition of temperature control instruments.	=	=
11	2	=	Water bath and dry oven Definition; application; control of-	=	=

			temp., safety, and shaking for each instrument; types of water bath.		
12	2	2	Incubator and autoclave Definition; parts; and uses for each instrument.	=	=
13	2	2	Colorimeter and photometer Definition; parts of the colorimeter; Filters; Definition; principle of working; photon counting; photography.	=	=
14-15	2	2	Spectrophotometer Definition; types of devices; method of working; spectroradiometer; visible light reflectance photometry.	=	=
Practical Part					
1-2	4+4	=	Microscope; Type of the microscope; Type of lenses, uses	=	=
3-4	4+4	=	Dark field-microscope; Polarizing microscope	=	=
5-6	4+4	=	Electron microscope; microscope fluorescent microscope	=	=
7-8	4+4	=	Centrifuge; Types of the centrifuge; Uses of each type	=	=
9	4+4	=	Design of the centrifuge	=	=
10-11	4+4	=	Sterilization equipment's. Hot air oven. Incubator	=	=

			Water bath		
12-13	4+4	=	Colorimeter; Photometer	=	=
14-15	4+4	=	Spectrophotometer The uses and the purpose for each	=	=

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)	Medical devices book There is also a catalog available with the prescribed device Laboratory equipment, product guide 2005/2006
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	


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Scientific Supervision and Scientific Evaluation Apparatus
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Accreditation Department



Academic Course Description Guide

2024/2025

Course Description Form

1. Course Name:					
(Clinical chemistry)					
2. Course Code:					
CH114, CH123					
3. Semester / Year:					
First academic year					
4. Description Preparation Date:					
16-9-2024					
5. Available Attendance Forms:					
Official attendance					
6. Number of Credit Hours (Total) / Number of Units (Total)					
6 Hours / 8Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Duaa Abd-alzahra Mohammed Ali					
Email: doaa.alickm@atu.edu.iq					
8. Course Objectives					
Course Objectives		- Acquire biochemistry skills and their applications in different contexts. - Encouraging originality of thought. - Provides the student with a broad and balanced foundation of knowledge and practical skills in the field of biochemistry. - Develop students' ability to apply their knowledge and skills to solve experiment issues in the diverse field of biochemistry. - Providing football students with the skills and skills that will enable them to move forward in the specialized fields of biochemistry.			
9. Teaching and Learning Strategies					
Strategy		- Cooperative education strategy. - Brainstorming strategy in teaching. - Cooperative education strategy. - Education strategy through exchange of opinions and discussion. - Education strategy by providing information. - Education strategy through training and presentation of scientific developments			
10. Course Structure (theoretical)					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	1. Raising the level of orientation towards learning various types. 2. Encouraging self-learning and independence, where the student can take responsibility for others and have the ability	Structure of Matter	- Cooperative education strategy. - Brainstorming strategy in teaching. - Cooperative education strategy.	Annual, oral and written examination reports, discussion

		to measure the academic progress he achieves.		• Education strategy through exchange of opinions and discussion. • Education strategy providing information • Education strategy through training and presentation of	
		3. Create opportunities to initiate cross-faculty collaboration and iterations			
		4. Helping the student to choose rational educational curricula.			
		5. Helping students maintain accountability in addition to the quality of academic programs.		scientific developme	
2-3	2		Chemical bonding		=
		=			=
4-5	2		Chemical equation reaction	=	
		=		=	
			The gaseous state		=
6-7	2		Air pollution	=	
		=			
			Oxidation -reduction		=
8	2		Liquid mixtures		=
9	2		solutions	=	=
		=			=
10-11	2		Acids-bases and salts	=	=
12-13	2		Alcohol	=	=
14-15	2		Aldehydes and ketones	=	=
		=		=	
16	2		Acids and Amines		=
17-18	2		Heterocyclic compounds	=	=
		=	Optical activity	=	=
19-20	2		Carbohydrates	=	=
21	2		Lipids		=
22	2		Proteins	=	=
		=		=	=
23-24	2		Question and problems		=
25-26	2			=	=
27-28	2		Identify laboratory tools	=	=
29-30	2		Multiple medical devices	=	

PRACTICE		=		=	
1	4		Methods of preparing solutions		
		=		=	
2-5	4		Acids and bases in water and blood		
6-7	4				
8-10	4		oxidation and reduction reactions		
11	4				
12-13	4		Separation of organic materials		
14-15	4				
16	4		Detection of alcohol		
17	4		Detection of carboxylic acids		
18-19	4		The unknown was tested		
20	4				
21	4		The unknown was tested		
22	4				
23	4		Detection of simple sugars		
24-25	4				
26-27	4		Learn about cholesterol		
28-29	4				
30	4		Proteins and their types		
		=	Determine the ratio of potassium and sodium		
			Determine the rate of jaundice		
			Determine the amylase enzyme level		
			Determine the level of hemoglobin		
			Bacteriological		

			analysis of culture CSF task Test		
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)			1- Jaroslav Racek and Daniel Rajdl , Clinical Biochemistry, first ed ,2016 2- Herbert Fromm and Mark Hargrove, Essentials of Biochemistry, 2012 3- Vijay Kumar Kiran Dip Gill, Basic Concepts in Clinical Biochemistry: A Practical Guide,2018 4- Uma Bhardwaj & Ravindra Bhardwa, Biochemistry for Nurses,2012 5-DM Vasudevan , Sreekumari S & Kan Vaidyanathan,Textbook of Biochemistry for Med Students,2013		
Recommended books and references (scientific journals, reports...)			1. Harper's Illustrated Biochemistry, 28th Ed., McGraw-Hill Companies, Inc, 2009. 2. Lippincott's Illustrated Reviews, 5th Ed., Williams & Wilkins, 2011.		
Electronic References, Websites			Web sites of Biochemistry		

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Medical Microbiology Course Description



2024/2025

Course Description Form

1. Course Name:	
Medical Microbiology I and II	
2. Course Code:	
CH112, CH121	
3. Semester / Year:	
Semester I and II (The first stage)	
4. Description Preparation Date:	
16-9-2024	
5. Available Attendance Forms:	
Weekly	
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. Hadi	
Email: Email: kuh.mead@atu.edu.iq and kuh.aud@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 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.

Education strategy through training and presenting scientific developments.

10. Course Structure (A) Theoretical lectures

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	2	1. Raising the level of motivation for learning of 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 a collective planning approach to 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. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure accountability and ensure the quality of academic programs.	General bacteriology; History and scope	1. Cooperative education strategy. 2. Education strategy brainstorming. 3. Education strategy collaborative concept planning. 4. Education strategy real time feedback 5. Education strategy notes series. 6. Education strategy by exchanging opinions and discussion. 7. Education strategy by presenting information. 8. 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, shigella	=	=
15	2	=	Pseudomonas	=	=
16	2	=	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 (B) Practical lectures

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	1. Raising the level of motivation for learning of 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 a collective planning approach to 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. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure	Safety in Microbiology Lab. And the main equipment	1. Cooperative education strategy. 2. Education strategy brainstorming. 3. Education strategy collaborative concept planning. 4. Education strategy real time feedback 5. Education strategy notes series. 6. Education strategy by exchanging opinions and discussion. 7. Education strategy by presenting information. 8. 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	=	Cocci shape bacteria	=	=
13	2	=	Bacilli shape bacteria	=	=
14	2	=	Spiral and filamentous shapes of bacteria	=	=
15-27	2	=	Show slide about Neisseria genus of 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; Show slide about Bordetella genus of bacteria; Show slides about Bacillus genus of bacteria; Show slide about Proteus genus of bacteria; Show slide about Hemophilus 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)	=	=

12. 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

13. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Main references (sources)	1. Bergey's Manual of Systematic Bacteriology by John G. Holt (Editor); Noel R. Krieg (Editor) 2. Biochemical Tests for Identification of Medical Bacteria, Jean F. Mac McFadden Lippincott Williams & Wilkins. 3. Sherris Medical Microbiology, Seventh Edition.
Recommended books and references (scientific journals, reports...)	1. Journal of Clinical Microbiology 2. Critical Reviews in Microbiology 3. Nature Reviews Microbiology 4. Journal of Virology 5. The ISME Journal 6. FEMS Microbiology Reviews 7. Journal of Bacteriology 8. International Journal of Food Microbiology 9. Microbiology and Molecular Biology Reviews
Electronic References, Websites	1. American Society for Microbiology 2. "to advance microbiological sciences through the pursuit of scientific knowledge and dissemination of the results of fundamental and applied research," 3. Careers blog at ASM 4. Useful career info, from choosing a post-doc position to HOW TO FIND THE SCIENCE CAREER FOR YOU 5. Microbiology Society 6. Membership organization for scientists who work in all areas of microbiology. Largest in Europe. 7. Society for Industrial Microbiology 8. "Nonprofit, international association dedicated to the advancement of microbiological sciences, especially as they apply to industrial products, biotechnology, materials, and processes."



Academic Program and Course Description Guide

2025

Course Description Form

1- Course name	English language
2- Course Code	CH117
3- Semester / Year:	Year
4- Description Preparation Date:	17-09-2024
5- Available Attendance Forms:	Weekly
6- Number of Credit Hours (Total) / Number of Units (Total)	2 (theory) / 2 units
7- Course administrator's name (mention all, if more than one name)	Assistant lecture: Fahad Dakhil Fahad Abo-Ghneim fahad.fahad@atu.edu.com
8- Course Objectives	General objective: The student gets to know the most basic programs in english Specific Objective: The student will be able to:

- 1- Learn present sentence details
- 2- Learn past sentence details
- 3- Learn future sentence details

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.
- Education strategy through training and presenting scientific developments.

10- Course Structure

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.	Introduction, back ground & development	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
=	=	Basic structure of English sentence	=	2	2
=	=	Simple present	=	2	3
=	=	Continues present	=	2	4-5
=	=	Perfect present	=	2	6-7
=	=	Simple past	=	2	8
=	=	Continuous past	=	2	9-10
=	=	Perfect past	=	2	11-12
=	=	Future sentence	=	2	13
=	=	Numbers and other words	=	2	14
=	=	Mid Exam	=	2	15

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)	Headway 3 Academic Skills Reading and Writing Student Book (Headway Academic Skills)
-Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

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



2024/2025

Course Description Form

1. Course Name:	
Physiology 1	
2. Course Code:	
CH116	
3. Semester / Year:	
Semester	
4. Description Preparation Date:	
20-2-2025	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
4 hours (2 theoretical + 2 practical) / 4 units	
7. Course administrators name (mention all, if more than one name)	
Name: prof. dr. Hassan A. Farman Email: Kuh.hsn@atu.edu.iq	
8. Course Objectives:	
Course Objectives	-Enabling students to understand the principle and basic of physiology science. Mode of actions for human body systems. Relation between these systems. Hormones that regulate these systems. Roles of nervous system in regulating the other systems

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. Education strategy through training and presenting scientific developments.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject name	Learning method	Evaluation method
1			Cells and tissues		- Online theoretical written exams power point - Practical tests in the lab
2-6			Blood		- Online theoretical written exams power point - Practical tests in the lab
7-11			heart and blood vessels		- Online theoretical written exams power point - Practical tests in the lab
12-15			respiratory system		- Online theoretical written exams power point - Practical tests in the lab
2 nd Term					
1-3			digestive system		- Online theoretical written exams power point - Practical tests in the lab
4-5			digestive tract		- Online theoretical written exams power point - Practical tests in the lab
6-8			urinary system		- Online theoretical written exams power point - Practical tests in the lab
9-11			endocrine glands		- Online theoretical written exams power point - Practical tests in the lab
12-15			nervous system		- Online theoretical written exams power point - Practical tests in the lab

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)	- Guyton and Hall Textbook of Medical Physiology – John E. Hall
Main references (sources)	□ Guyton and Hall Textbook of Medical Physiology – John E. Hall • One of the most widely used physiology textbooks, offering detailed explanations of human physiological mechanisms. □ Ganong's Review of Medical Physiology – Kim E. Barrett et al. • A concise yet comprehensive resource, ideal for review and understanding core physiological concepts. □ Berne & Levy Physiology – Bruce M. Koeppen, Bruce A. Stanton • Covers detailed cellular and molecular physiology with clinical correlations. □ Vander's Human Physiology: The Mechanisms of Body Function – Eric P. Widmaier, Hershel Raff, Kevin T. Strang • A well-structured introduction to human physiology, commonly used in undergraduate courses.
Recommended books and references (scientific journals, reports....)	Lieutenant and lectures prepared by the professor after the approval of the sectorial advisory
Electronic References, Websites	1. Online Physiology Textbooks & Resources • Medical Physiology (Guyton & Hall) – Elsevier eBook ○ https://www.elsevier.com (Access requires institutional or personal subscription) • Ganong's Review of Medical Physiology (AccessMedicine) ○ https://accessmedicine.mhmedical.com (Requires

subscription)

- **Berne & Levy Physiology (Elsevier ClinicalKey)**
 - <https://www.clinicalkey.com> (Institutional access)

2. Open Access Physiology Resources

- **Physiology Online (APS American Physiological Society)**
 - <https://www.physiology.org>
 - Publishes research articles, reviews, and educational resources in physiology.
- **National Center for Biotechnology Information (NCBI) – Physiology Articles**
 - <https://www.ncbi.nlm.nih.gov/books/NBK7/>
 - Free access to various physiology-related textbooks and articles.
- **PubMed (for Physiology Research Papers)**
 - <https://pubmed.ncbi.nlm.nih.gov>
 - A database of biomedical literature, including thousands of physiology research articles.
- **MedEdPORTAL (Physiology Educational Materials)**
 - <https://www.mededportal.org>
 - Open-access teaching and learning resources in medical education.

3. Physiology Journals (Open Access & Subscription-Based)

- **The Journal of Physiology (Wiley)**
 - <https://physoc.onlinelibrary.wiley.com>
- **American Journal of Physiology (AJP - American Physiological Society)**
 - <https://journals.physiology.org/journal/ajpheart>
- **Physiological Reviews**
 - <https://journals.physiology.org/journal/physrev>

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



Academic Course Description

2025

Course Description Form

1. Course Name:					
Communicable Diseases I					
2. Course Code:					
CH212					
3. Semester / Year:					
First semester/ Second stage					
4. Description Preparation Date:					
16-9-2024					
5. Available Attendance Forms:					
Weekly					
6. Number of Credit Hours (Total) / Number of Units (Total)					
6/4					
7. Course administrator's name (mention all, if more than one name)					
Name: Manar Kareem Al-Quraishy					
Email: manar.fadelckm@atu.edu.iq					
8. Course Objectives					
Course Objectives		1. The student learns about diseases that are transmitted from humans to humans or from animals to humans. 2. That the student becomes familiar with the methods of disease transmission in general and the definitions used in the course. 3. The student learns about diseases caused by viruses and bacteria. 4. Learns how to control or prevent communicable diseases.			
9. Teaching and Learning Strategies					
Strategy		1. Note-taking and summarizing strategy. 2. Self-questioning strategy. 3. Brainstorming strategy. 4. Cooperative learning strategy. 5. Reciprocal teaching or discussion strategy 6. Education strategy by presenting information. 7. Education strategy through training and presenting scientific development 8. Strategy for developing thinking.			
10. Course Structure					
A/ Theoretical					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	2	1. Raising the level of motivation for learning of its various types internal motivation, self-motivation, and achievement motivation. 2. Encouraging self-directed independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Creating opportunities to implement a collective planning approach to the curriculum, and cooperation among faculty members to identify gaps and repetitions. 4. Helping the student to ensure decisions related to the curriculum and educational environment are rational. 5. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure accountability and ensure quality of academic programs.	General bacteriology; History and scope	1. Note-taking and summarizing strategy. 2. Self-questioning strategy. 3. Brainstorming strategy. 4. Cooperative learning strategy. 5. Reciprocal teaching or discussion strategy. 6. Education strategy by presenting information. 7. Education strategy through training and presenting scientific developments. 8. Strategy for developing thinking.	Daily, oral and written examinations, reports, discussions.
2	2	=	Transmission of infectious diseases	=	=
3	2	=	Isolation measures for infectious diseases.	=	=
4-6	2	=	Definitions	=	=
7	2	=	Viral diseases	=	=
8	2	=	Measles	=	=
9	2	=	Rubella	=	=
10	2	=	Congenital rubella	=	=
11	2	=	Chicken pox and herpes zoster	=	=
12	2	=	Small pox	=	=
13	2	=	Common cold and influenza	=	=
14	2	=	Enter-virus, poliomyelitis	=	=
15	2	=	Rabies	=	=
		=	Mumps and infectious mononucleosis	=	=
B/ Practical					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	4	1. Raising the level of motivation for learning of its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Creating opportunities to implement a collective planning approach to the curriculum, and cooperation among faculty members to identify gaps and repetitions. 4. Helping the student to ensure decisions related to the curriculum and educational environment are rational. 5. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure accountability and ensure the quality of academic programs.	Introduction to the meaning of prevention and control	1. Note-taking and summarizing strategy. 2. Self-questioning strategy. 3. Brainstorming strategy. 4. Cooperative learning strategy. 5. Reciprocal teaching or discussion strategy. 6. Education strategy by presenting information. 7. Education strategy through training and presenting scientific developments. 8. Strategy for developing thinking.	Daily, oral and written examinations, reports, discussions.
2	4	=	Definition of the technical terms used in the subject	=	=
3	4	=	Transmission of infectious diseases	=	=
4-6	4	=	Isolation measures of 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 infectious process – point of exit	=	=
13	4	=	Chain of events in an infectious process – agent transmission and entry	=	=
14	4	=	Chain of events of events in an infectious process – host	=	=
15	4	=	Introduction to the meaning of prevention and control	=	=

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. 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. S. B.M. & Shashi Alok • Research Methodology Concise Book by M. Yahya Al-Nour

	• Research Methodology by Dr. Nishikant Jha • Research Methodology and Scientific Writing by 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
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Academic Course Description

2024-2025

Course Description Form

1. Course Name:					
Communicable Diseases II					
2. Course Code:					
CH222					
3. Semester / Year:					
2024					
4. Description Preparation Date:					
16-9-2024					
5. Available Attendance Forms:					
weekly					
6. Number of Credit Hours (Total) / Number of Units (Total)					
6/4					
7. Course administrator's name (mention all, if more than one name)					
Name: Manar Kareem Al-Quraishy					
Email: manar.fadelckm@atu.edu.iq					
8. Course Objectives					
Course Objectives	1. The student learns about diseases that are transmitted from humans to humans or from animals to humans. 2. That the student becomes familiar with the methods of disease transmission in general and the definitions used in the course. 3. The student learns about diseases caused by viruses and bacteria. 4. Learns how to control or prevent communicable diseases.				
9. Teaching and Learning Strategies					
Strategy	1. Note-taking and summarizing strategy. 2. Self-questioning strategy. 3. Brainstorming strategy. 4. Cooperative learning strategy. 5. Reciprocal teaching or discussion strategy 6. Education strategy by presenting information. 7. Education strategy through training and presenting scientific development 8. Strategy for developing thinking.				
10. Course Structure					
A/ Theoretical					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	2	1. Raising the level of motivation for learning of its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Creating opportunities to implement a collective planning approach to the curriculum, and cooperation among faculty members to identify gaps and repetitions. 4. Helping the student to ensure decisions related to the curriculum and educational environment are rational. 5. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure accountability and ensure quality of academic programs.	Arthropod born viral diseases	1. Note-taking and summarizing strategy. 2. Self-questioning strategy. 3. Brainstorming strategy. 4. Cooperative learning strategy. 5. Reciprocal teaching or discussion strategy. 6. Education strategy by presenting information. 7. Education strategy through training and presenting scientific developments. 8. Strategy for developing thinking.	Daily, oral and written examinations, reports, 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	=	=
12-13	2	=	Bacterial meningitis	=	=
14	2	=	Viral meningitis	=	=
15	2	=	Revision of prevention measures	=	=

B/ Practical

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
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1-3	4	1. Raising the level of motivation for learning of its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Creating opportunities to implement a collective planning approach to the curriculum, and cooperation among faculty members to identify gaps and repetitions. 4. Helping the student to ensure decisions related to the curriculum and educational environment are rational. 5. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure accountability and ensure quality of academic programs.	Diseases statistics, incidence, prevalence, mortality rate and case	1. Note-taking and summarizing strategy. 2. Self-questioning strategy. 3. Brainstorming strategy. 4. Cooperative learning strategy. 5. Reciprocal teaching or discussion strategy. 6. Education strategy by presenting information. 7. Education strategy through training and presenting scientific developments. 8. Strategy for developing thinking.	Daily, oral and written examinations, reports, discussions.
4	4	=	Epidemic measures in control of infectious diseases	=	=
5	4	=	Health education in infectious diseases	=	=
6	4	=	Notification of diseases	=	=
7	4	=	International measures in control of infectious diseases	=	=
8-10	4	=	Control of blood borne diseases	=	=
11	4	=	Control of water and food borne diseases	=	=
12	4	=	Control of arthropod borne diseases	=	=
13	4	=	Visits to the communicable diseases center	=	=
14	4	=	Visit to the T.B institute	=	=
15	4	=	Visit to the isolation hospital	=	=

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. 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. S. B.M. & Shashi Alok - Research Methodology Concise Book by M. Yahya Al-Nour - Research Methodology by Dr. Nishikant Jha

	• Research Methodology and Scientific Writing by 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
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Accreditation Department



Academic Program and Course Description Guide

2024/2025

Course Description Form

1- Course name	
Epidemiology	
2- Course Code	
	CH214, CH224
3- Semester / Year	, '2024
4- Description Preparation Date:	
	16-9-2024
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
	Mohammed.amri92@gmail.com

8- Course Objectives

General goal: to know how diseases occur and how to analyze the occurrence of epidemics.
Specific objective: Calculating the spread of diseases, calculating the different rates of diseases and deaths, and how infectious diseases are transmitted and controlled.

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.
- Education strategy through training and presenting scientific developments.

10- Course Structure

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 epidemiology	=	2	8-9
=	=	Epidemiology of infectious diseases	=	2	10-11

=	=	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 occurrence	=	2	27-28
=	=	Exploring diseases occurrence-place	=	2	29-30

10-Course structure (practical)

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	Training for calculation	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
=	=	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					
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)		Rothman KJ, Greenland S, Lash TL. Modern epidemiology. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2008 Sep 20. Rothman KJ. Epidemiology: an introduction. Oxford university press; 2012 May 4.			
-Main references (sources)		• Journal of Clinical Microbiology • Critical Reviews in Microbiology • Nature Reviews Microbiology • Journal of Virology • The ISME Journal			
Recommended books and references (scientific journals, reports...)		Szklo M, Nieto FJ. Epidemiology: beyond the basics. Jones & Bartlett Publishers; 2014.			
Electronic References, Websites		Google scholar			

**Ministry of Higher Education and Scientific Research
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Academic Course Description

2024/2025

1- Course name					
Nutrition 1 and 2					
2- Course Code					
CH211, CH221					
3- Semester / Year:					
2024					
4- Description Preparation Date:					
16-9-2024					
5- Available Attendance Forms:					
6- Number of Credit Hours (Total) / Number of Units (Total)					
2 (theory) 3 (practical)/ 7 unit					
7- Course administrator's name (mention all, if more than one name)					
Dr. Abdulameer Al-khalidy ameeralkhalidy67@gmail.com					
8- Course Objectives					
General objective: The student gets to know the most important nutritional disorders from over or deficiency of macronutrients or micronutrients and management of these disorders Specific Objective: The student will be able to: 1- Learn how to deal with macronutrients or micronutrients disorders 2- Identify the most important diseases which are result from nutritional disorders 3- Learn about ways to prevent of nutritional disorders					
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. - Education strategy through training and presenting scientific developments.			
10- Course Structure					
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.	clinical nutritional assessments	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	2	1-2

	Information Presentation Education Strategy, Training and Presenting Scientific Updates Education Strategy.		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.		
=	=	The carbohydrates	=	2	3-5
=	=	The proteins	=	2	6-7
=	=	The lipids	=	2	8-9
=	=	minerals	=	2	10-11
=	=	vitamins	=	2	12-13
=	=	Fluid and dehydration	=	2	14-16
=	=	Infant breast feeding	=	2	17-18
=	=	Infant formula feeding	=	2	19-20
=	=	Milk composition	=	2	21
=	=	Technique of breast feeding	=	2	22-24
=	=	obesity	=	2	25-26
=	=	malnutrition	=	2	27-28
=	=	Nutritional anemia	=	2	29-30

10-Course structure (practical)

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.	clinical nutritional assessments	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
=	=	The carbohydrates	=	2	2-4
=	=	The proteins	=	2	5
=	=	The lipids	=	2	7-6
=	=	Minerals	=	2	10-9-8
=	=	Vitamins	=	2	12-11

=	=	Fluid and dehydration	=	2	13
=	=	Infant breast feeding	=	2	15-14
=	=	Infant formula feeding	=	2	17-16
=	=	Milk composition	=	2	19-18
=	=	Technique of breast feeding	=	2	21-20
=	=	obesity	=	2	22-24
=	=	malnutrition	=	2	25-28
=	=	Nutritional anemia	=	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)	Nutrition and Diet Therapy
Main references (sources)	Krause's Food & the Nutrition Care Process
Electronic References, Websites	Google scholar



Course Description Form

1. Course Name: pharmacology

2. Course Code: Second semester/ Second stage

CH213, CH223

3. Semester / Year: semester

2024/2025

4. Description Preparation Date:

16-9-2024

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.iq

8. Course Objectives

Course Objectives	1. 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. 2. The student learns about chronic diseases and their effects on the body and its effectiveness
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9. Teaching and Learning Strategies

Strategy	Cooperative education strategy. Technical strategy brainstorming. education strategy collaborative concept planning. Education strategy real-time feedback. Education strategy note series. Education strategy by exchanging opinion and discussion. education strategy by presenting information. Education strategy through training and presenting scientific development
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10. Course Structure-theory

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
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1	2	1. Raising the level of motivation for learning of its various types. 2. Internal motivation, social motivation, and achievement motivation. 3. Encouraging self-directed and independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 4. Creating opportunities to implement a collective 5. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure the quality of academic programs. Planning approach 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-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.	Daily exams Oral and written reports, discussions
3-5	2	=	Pharmacokinetics, Basic & clinical application 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 dr 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, Skeletal mus relaxants, parkinsonism, Antipsychotics antigenic, Antidepressant Opioid agonis antagonists, C stimulants, D of abuse	=	=

19-20	2	=	Drugs acting hematopoietic system, B1 forming ag Agents used hyperlipidemia Drugs used disorders coagulation	=	=
21-22	2	=	Drugs used treat inflammation, Non – steroid anti-inflammat agnate, Non opined analge Drugs used gout	=	=
23-24	2	=	Drugs used peptic ulc Anti-emetics, Anti-diarrthosa laxatives	=	=

25-26	2	=	Endocrine drugs Hypothalamic pituitary hormones, Thyroid & thyroid drugs Adrenocorticoids adrenocortical agent, gonadotropins hormones inhibitors, Pancreatic hormones & diabetics, Agents that affect electrolyte mineral homeostasis.	=	=
27-28	2	=	Chemotherapeutic drugs	=	=

29-30	2	=	Principles antimicrobials drugs ac penicillin's: Cephalosporin Chloramphenic & tetracyclin Amino glycos & polymyx Anti-mycobacterial, Sulfonamides trimethoprim, Antifungal, Antiviral Urin antiseptics, Disinfectant, A parasitic, Antiprotozoal, Anti-helminth Cancer chemotherapy, Immune-pharmacology, Toxicology,	=	=
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Course Structure-practical

Hour	Require Learnin Outcom	Unit or subject name	Learning meth	Evaluation meth	Hours
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1	2	1. Raising the level of motivation for learning of its various internal motivation, social motivation, and achievement motivation. 6. Encouraging self-directed and independent learning students can take responsibility for their studies and ability to measure their academic progress. 7. Creating opportunities to implement a collective 8. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure the quality of academic Planning approach 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-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.	Daily exams: Oral written reports, discussions
3-2-1	2	=	pharmacokinetics	=	=

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



Academic Course Description

2025

1- Course name					
Chronic diseases 1 and 2					
2- Course Code					
CH315, CH326					
3- Semester/ Year:					
2024/2025					
4- Description Preparation Date:					
16-9-2024					
5- Available Attendance Forms:					
6- Number of Credit Hours (Total) / Number of Units (Total)					
2 (theory) 4 (practical)/ 4 unit					
7- Course administrator's name (mention all, if more than one name)					
Dr. Abdulameer Al-khalidy ameeralkhalidy67@gmail.com					
8- Course Objectives					
General objective: The student gets to know the most important of non-communicable diseases (epidemiology, definitions. Risk factors, preventions and management) Specific Objective: The student will be able to: 1- Learn how to deal with risk factors of non-communicable diseases 2- Identify the most important non-communicable diseases 3- Learn about ways to prevent and control of non-communicable diseases					
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. - Education strategy through training and presenting scientific developments.			
10- Course Structure					
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.	Epidemiology of non-communicable diseases.ppt	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	2	1-2

	Information Presentation Education Strategy, Training and Presenting Scientific Updates Education Strategy.		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.		
=	=	Diabetes Mellitus	=	2	3-5
=	=	Hypertension	=	2	6-7
=	=	Ischemic heart diseases	=	2	8-9
=	=	Heart failure	=	2	10-11
=	=	Rheumatic fever	=	2	12-13
=	=	Stroke	=	2	14-16
=	=	Asthma	=	2	17-18
=	=	Peptic ulcer	=	2	19-20
=	=	Epilepsy	=	2	21
=	=	Parkinsonism	=	2	22-24
=	=	Tumors	=	2	25-26
=	=	Addiction Types	=	2	27-28
=	=	Introduction on Radiology and ECG	=	2	29-30

10-Course structure (practical)

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.	Diabetes Mellitus	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
=	=	Hypertension	=	2	2-4
=	=	Ischemic heart diseases	=	2	5
=	=	Heart failure	=	2	7-6
=	=	Rheumatic fever	=	2	10-9-8

=	=	stroke	=	2	12-11
=	=	Asthma	=	2	13
=	=	Peptic ulcer	=	2	15-14
=	=	Epilepsy	=	2	17-16
=	=	Parkinsonism	=	2	19-18
=	=	Tumors	=	2	21-20
=	=	Addiction	=	2	22-24
=	=	Introduction on ECG	=	2	25-28
=	=	Introduction on Radiology	=	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)	Andreoli and Carpenter's. Cecil Essentials of Medicine;Saunders
Main references (sources)	Davidson's. Principles and Practice of Medicine; Churchil Livingstone
Electronic 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**



Toxicology Course Description

2025

1- Course name	Toxicology
2- Course Code	CH321
3- Semester / Year:	2024/2025
4- Description Preparation Date:	16-9-2024
5- Available Attendance Forms:	Weekly
6- Number of Credit Hours (Total) / Number of Units (Total)	2 (theory) 2 (practical)/ 3 unit
7- Course administrator's name (mention all, if more than one name)	Assisst. Prof. Dr. Saad Saleem Raheem kuh.sad@atu.edu.iq

8- Course Objectives

- 1-Understanding the toxicants in the environment, describe their route enter to the body.
- 2-Describe metabolic process, distribution, and excretion from the body.
- 3-Undertand the effect of toxicants in the living body.
- 4-Know the fundamental problems of toxicants in the world
- 5-Determine sources of toxicants
- 6-enhance their interest in gaining information about toxicants from websites

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.
- Education strategy through training and presenting scientific developments.

10- Course Structure

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.	Toxicology	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	2	

	Information Presentation Education Strategy, Training and Presenting Scientific Updates Education Strategy.		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.		
=	=	introduction to toxicology definition and scope- relationship to other - sciences sources of toxic - compounds movement of toxicants in - the environment	=	2	1
=	=	Dose-response relationships absorption and distribution- biotransformation and - excretion	=	2	2
=	=	Classes of toxicant toxicants in air - types of air toxicants- sources of air toxicants - Examples of air toxicant - environmental effects of air - toxicants	=	2	3
=	=	Water and soil toxicants Sources of water and soil toxicants Examples of toxicant, lead, arsenic, cadmium, dioxins	=	2	4
=	=	Mercury, pesticides, nitrates and phosphates Oils and petroleum	=	2	5
=	=	Occupational toxicants Regulation of exposure levels Routes of exposure	=	2	6
=	=	Examples of industrial toxicants.	=	2	7
=	=	Toxic action	=	2	8
=	=	Mechanisms of acute toxicity	=	2	9
=	=	Organ toxicity, hepatotoxicity, mechanisms of hepatotoxicity Examples of hepatotoxicants carbon tetrachloride, ethanol	=	2	10
=	=	Neurotoxicity	=	2	11
=	=	Nephrotoxicity, example metal (cadmium), antimicrobial agents(cephalosporin)	=	2	12
=	=	Reproductive system toxicity	=	2	13
=	=	Endocrine toxicology	=	2	14

[illegible]

	North Carolina State University
- Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Google scholar

Ministry of Higher Education and Scientific Research
 Scientific supervision and evaluation device
 Department of Quality Assurance and Academic
 Accreditation
 Accreditation Department



Course description guide

2024/2025

Course description form

1. Course Name: Biostatistics
Biostatistics
2. Course Code
CH225
3. the Course ()
Course Two: The second stage
4. Date this description was prepared:
16-9-2024
5. Available forms of attendance:
6. Number of study hours (total)/number of units (total) 4/6
4/6
7. Name of the course administrator

M.M.: Ghassan Dhaher Muhammadgmohameed@atu.edu.iq

8. Course objectives

Objectives of the article:

General goal:Introducing the student to medical and vital statistical standards and their applications in the field of health, and choosing what is appropriate from them to display and analyze health and medical information.

Special goal: 1- Introducing students to standards related to health and vital statistics.

2- Introducing students to the methods used to describe and analyze health and vital data.

Objectives of study subject

9. Teaching and learning strategies

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.
Education strategy through training and presenting scientific developments.

The strategy

First: The structure of the (theoretical) course.

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours (the theory)	the week
Daily, oral and written examinations, reports, discussions.	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. Education strategy through training and presenting scientific developments.	Understanding the Data	1. Raising the level of motivation for learning of 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 a collective planning approach to 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. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure accountability and ensure the quality of academic programs.	4	1-2
=	=	Univariate Descriptive Statistics	=	6	3-5
=	=	Estimation by intervals	=	6	6-8

=	=	Introduction to Inferential Statistics & Hypothesis testing	=	6	9-12
=	=	Correlation & Regression	=	6	13-15
10 - Second: Structure of the (practical) course					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours (the operation)	the week
Daily, oral and written examinations, reports, discussions.	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. Education strategy through training and presenting scientific developments.	Understanding the Data	1. Raising the level of motivation for learning of 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 a collective planning approach to 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. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the student to ensure accountability and ensure the quality of academic programs.	8	1-2
=	=	Univariate Descriptive Statistics	=	2	3-5
=	=	Estimation by intervals	=	6	6-8
=	=	Introduction to Inferential Statistics & Hypothesis testing	=	6	9-12
=	=	Correlation & Regression	=	6	13-15

11. Course evaluation

Degree distribution from 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc.

12. Learning and teaching resources

	Required textbooks (methodology, if any)
✓ 1- Trial MF (2010) Elementary Statistics, Eleventh edition. Addison-Wesley. ✓ 2- Wayne WD (2010) Biostatistics. John Wiley & Sons, INC. 3- Introduction to statistics, Khasi Al-Rawi	Main references (sources)

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



Academic Course Description

2024/2025

1- Course name					
Environmental Pollution					
2- Course Code					
CH312					
3- Semester / Year:					
Semester					
4- Description Preparation Date:					
5- Available Attendance Forms:					
Weekly					
6- Number of Credit Hours (Total) / Number of Units (Total)					
2 (theory) 4 (practical)/ 4 unit					
7- Course administrator's name (mention all, if more than one name)					
Assisst. Lecturer. Essam Najim Abed					
8- Course Objectives					
1 - Identify the most important environmental components and their sources of pollution. 2- Identify water, soil, and air pollution in cities and how to treat pollutants. 3- Treat all industrial waste. 4- Treat groundwater and surface water. 5- Identify global environmental problems and greenhouse gas emissions..					
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. • Education strategy through training and presenting scientific developments.			
10- Course Structure					
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	Environmental Pollution	1-Enhancing motivation for learning in its various forms: internal motivation, social motivation, and achievement motivation. 2-Encouraging self-directed and	6	15

	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.		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.		
Theoretical vocabulary					
		Environmental health: definition, scope of environmental, health, types of environmental		2	1
		Air pollution: indoor air pollution, outdoor air pollution control measures		2	2
		Environmental of work place: Approaches for control toxic air borne chemicals		2	3
		Water and sewage: Source of drinking water, Health hazard, Water supplies purification, Excreta disposal & sewage treatment		2	4
		Environmental and food: Food born illness, Food preservation		2	5
		Housing environmental , Solid waste, Insects & rodents control		2	6
		Environmental injury control		2	7
		Electromagnetic radiation , ill effect of irradiation		2	8
		Environmental health in rural areas		2	9
		How to monitor environmental		2	10
		How to measure release in an exposure		2	11
		Macroscopically view of environmental health		2	12
		Environmental factors in disease causation		2	13
		Biological factors in disease causation		2	14
		Deforestation		2	15
Practical Vocabulary					

			Required Learning Outcomes	Hours	
			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	
		Introduction to environmental health		2	1
		Solution, glass wear analysis, type of analysis with the world standard		2	2
		Physical analysis of water, Color and turbidity		2	3
		Solid material in water, Electrical conation, Biochemical analysis (PH)		2	4
		Acidity, Alkalinity, Hard water, Sulfate		2	5
		Chloride, Residue chloride, Dissolved oxygen, organic material, phosphate		2	6
		Nitrogen compound, Metal and their effect of main test for measurement		2	7
		Metal analysis flame photometer		2	8
		Calcium and magnesium measurement by titration		2	9
		Biological environmental and biological indicators, water organisms		2	10
		The biological treatment of water and their glass wear sampling and test for water		2	11
		Bacteriological examination of water, Classification of bacteria in water		2	12
		Total count of bacteria in water, Detection of streptococcus in water, Problems of chloroform		2	13
		Total count of bacteria in water, Detection of streptococcus in water, Problems of chloroform		2	14
		Revision		2	15
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)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Google scholar

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



Course Description

2025

1. Course name:	Advance Vital Statistics1						
2. Course code	CH314						
3. First Semester	Third stage						
4. Date this description was prepared:	17-9-2024						
5. Available attendance forms:	Weekly						
6. Number of study hours (total) / Number of units (total)	4/6						
7. Course Instructor Name	M. Sc.: Ghassan Dhahir Mohammed gmohameed@atu.edu.iq						
8. Course objectives	<table border="1"> <tr> <td> <u>General objective:</u> To introduce the student to vital statistical measures and their application in the field of health or community health in order to provide an opportunity for workers specializing in the field of public health or community health to contribute effectively to the development and modernization of public or private health programs. <u>Special objective:</u> 1- Introducing students to the standards of biostatistics. 2- Introducing students to the means of evaluating health and medical operations and sites in order to reorganize them or operate them more efficiently. </td> <td>Subject objectives</td> </tr> </table>					<u>General objective:</u> To introduce the student to vital statistical measures and their application in the field of health or community health in order to provide an opportunity for workers specializing in the field of public health or community health to contribute effectively to the development and modernization of public or private health programs. <u>Special objective:</u> 1- Introducing students to the standards of biostatistics. 2- Introducing students to the means of evaluating health and medical operations and sites in order to reorganize them or operate them more efficiently.	Subject objectives
<u>General objective:</u> To introduce the student to vital statistical measures and their application in the field of health or community health in order to provide an opportunity for workers specializing in the field of public health or community health to contribute effectively to the development and modernization of public or private health programs. <u>Special objective:</u> 1- Introducing students to the standards of biostatistics. 2- Introducing students to the means of evaluating health and medical operations and sites in order to reorganize them or operate them more efficiently.	Subject objectives						
9. Teaching and learning strategies	<table border="1"> <tr> <td> Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments. </td> <td>Strategy</td> </tr> </table>					Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.	Strategy
Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.	Strategy						
1.First: The structure of the course (theoretical)							
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches (Theory)	The week		
Daily examinations, oral and written, reports,	Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative	Time Series Analysis	1. Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and	8	1-4		

discussions.	concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.		independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Create opportunities to apply the collective curriculum planning approach, and for collaboration among faculty members to identify gaps and duplications. 4. Helping the student ensure that decisions related to curricula and the educational environment are rational. 5. Promote the philosophy of continuous follow-up and improvement. 6. Helping the student to assert accountability and ensure the quality of academic programs.		
=	=	The Vital Statistics	=	2	5
=	=	Mortality Statistics.	=	6	6-8
=	=	Fertility Statistics	=	6	9-11
=	=	Morbidity Statistics	=	6	12-15
10 - Second: Course structure (practical)					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches (The process)	The week
Daily examinations, oral and written, reports, discussions.	Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.	Time Series Analysis	1. Raising 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. Create opportunities to apply the collective curriculum planning approach, and for collaboration among faculty members to identify gaps and duplications. 4. Helping the student ensure that decisions related to curricula and the educational environment are rational. 5. Promote the philosophy of continuous follow-up and improvement. 6. Helping the student to assert accountability and ensure the quality of academic programs.	8	1-4
=	=	The Vital Statistics	=	2	5
=	=	Mortality Statistics.	=	6	6-8

=	=	Fertility Statistics	=	6	9-11
=	=	Morbidity Statistics	=	6	12-15

11. Course Evaluation

Grade distribution from 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

12. Learning and teaching resources

	Required textbooks (methodology if any)
✓ 1- Trial MF (2010) Elementary Statistics, Eleventh edition. Addison-Wesley. ✓ 2- Wayne WD (2010) Biostatistics. John Wiley & Sons, INC. 3- Introduction to Statistics Khashi Al-Rawi	Main References (Sources)

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



Course Description

2025

1. Course name:	Advance Vital Statistics1						
2. Course code	CH314						
3. First Semester	Third stage						
4. Date this description was prepared:	17-9-2024						
5. Available attendance forms:	Weekly						
6. Number of study hours (total) / Number of units (total)	4/6						
7. Course Instructor Name	M. Sc.: Ghassan Dhahir Mohammed gmohameed@atu.edu.iq						
8. Course objectives	<table border="1"> <tr> <td> <u>General objective:</u> To introduce the student to vital statistical measures and their application in the field of health or community health in order to provide an opportunity for workers specializing in the field of public health or community health to contribute effectively to the development and modernization of public or private health programs. <u>Special objective:</u> 1- Introducing students to the standards of biostatistics. 2- Introducing students to the means of evaluating health and medical operations and sites in order to reorganize them or operate them more efficiently. </td> <td>Subject objectives</td> </tr> </table>					<u>General objective:</u> To introduce the student to vital statistical measures and their application in the field of health or community health in order to provide an opportunity for workers specializing in the field of public health or community health to contribute effectively to the development and modernization of public or private health programs. <u>Special objective:</u> 1- Introducing students to the standards of biostatistics. 2- Introducing students to the means of evaluating health and medical operations and sites in order to reorganize them or operate them more efficiently.	Subject objectives
<u>General objective:</u> To introduce the student to vital statistical measures and their application in the field of health or community health in order to provide an opportunity for workers specializing in the field of public health or community health to contribute effectively to the development and modernization of public or private health programs. <u>Special objective:</u> 1- Introducing students to the standards of biostatistics. 2- Introducing students to the means of evaluating health and medical operations and sites in order to reorganize them or operate them more efficiently.	Subject objectives						
9. Teaching and learning strategies	<table border="1"> <tr> <td> Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments. </td> <td>Strategy</td> </tr> </table>					Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.	Strategy
Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.	Strategy						
1. First: The structure of the course (theoretical)							
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches (Theory)	The week		
Daily examinations, oral and written reports.	Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative	Time Series Analysis	1. Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. 2. Encouraging self-directed and	8	1-4		

discussions.	concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.		independent learning, where students can take responsibility for their studies and have the ability to measure their academic progress. 3. Create opportunities to apply the collective curriculum planning approach, and for collaboration among faculty members to identify gaps and duplications. 4. Helping the student ensure that decisions related to curricula and the educational environment are rational. 5. Promote the philosophy of continuous follow-up and improvement. 6. Helping the student to assert accountability and ensure the quality of academic programs.		
=	=	The Vital Statistics	=	2	5
=	=	Mortality Statistics.	=	6	6-8
=	=	Fertility Statistics	=	6	9-11
=	=	Morbidity Statistics	=	6	12-15
10 - Second: Course structure (practical)					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches (The process)	The week
Daily examinations, oral and written, reports, discussions.	Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.	Time Series Analysis	1. Raising 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. Create opportunities to apply the collective curriculum planning approach, and for collaboration among faculty members to identify gaps and duplications. 4. Helping the student ensure that decisions related to curricula and the educational environment are rational. 5. Promote the philosophy of continuous follow-up and improvement. 6. Helping the student to assert accountability and ensure the quality of academic programs.	8	1-4
=	=	The Vital Statistics	=	2	5
=	=	Mortality Statistics.	=	6	6-8

=	=	Fertility Statistics	=	6	9-11
=	=	Morbidity Statistics	=	6	12-15

11. Course Evaluation

Grade distribution from 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

12. Learning and teaching resources

	Required textbooks (methodology if any)
✓ 1- Trial MF (2010) Elementary Statistics, Eleventh edition. Addison-Wesley. ✓ 2- Wayne WD (2010) Biostatistics. John Wiley & Sons, INC. 3- Introduction to Statistics Khashi Al-Rawi	Main References (Sources)

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



Advance Vital Statistics

2025

1. Course name:		Advance Vital Statistics 2	
2. Course code		CH325	
3. semester (Second)		Third stage/ semester	
4. Date this description was prepared:		19-1-2025	
5. Available attendance forms:			
6. Number of study hours (total) / Number of units (total)		4/6	
7. Course Instructor Name		Msc.: Ghassan Dhahir Mohammed gmohameed@atu.edu.iq	
8. Course objectives		Subject objectives	
General objective: To introduce the student to vital statistical measures and their application in the field of health or community health in order to provide an opportunity for workers specializing in the field of public health or community health to contribute effectively to the development and modernization of public or private health programs. Special objective: 1- Introducing students to the standards of biostatistics. 2- Introducing students to the means of evaluating health and medical operations and sites in order to reorganize them or operate them more efficiently.			
9. Teaching and learning strategies		Strategy	
Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education strategy through training and presentation of scientific developments.			
1. First: The structure of the course (theoretical)			
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes
			Watch es The week

				(Theory)	
Daily examinations, oral and written, reports, discussions	Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education by training strategy And display scientific developments.	Life Tables	Raising the level of motivation for learning in its various forms: intrinsic 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. Create opportunities to apply the collective curriculum planning approach, and for collaboration among faculty members to identify gaps and duplications. 4. Helping the student ensure that decisions related to curricula and the educational environment are rational. 5. Promote the philosophy of continuous follow-up and improvement. 6. Helping the student to assert accountability and ensure the quality of academic programs.	2	1
=	=	Life Tables contains	=	2	2
=	=	The Cohort Life table	=	6	3-5
=	=	The Current Life table	=	6	6-8
=	=	Stochastic process Queuing theory	=	14	9-15

10 - Second: Course structure (practical)

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches (The process)	The week
Daily examinations, oral and written, reports, discussions	Cooperative learning strategy. Brainstorming teaching strategy. Education strategy planning collaborative concept. Real-time feedback education strategy Education Strategy Notes Series. Teaching strategy by exchanging opinions and discussion. Information presentation teaching strategy. Education by training strategy And display scientific developments.	Life Tables	1. Raising 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. Create opportunities to apply the collective curriculum planning approach, and for collaboration among faculty members to identify gaps and duplications. 4. Helping the student ensure that decisions related to curricula and the educational environment are rational. 5. Promote the philosophy of continuous follow-up and improvement. 6. Helping the student to assert accountability and ensure the quality of academic programs.	4	1
=	=	Life Tables contains	=	4	2
=	=	The Cohort Life table	=	12	3-5
=	=	The Current Life table	=	12	6-8

=	=	Stochastic process Queuing theory	=	24	9-15
Course Evaluation					.11
Grade distribution from 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.					
Learning and teaching resources					.12
			Required textbooks (methodology if any)		
			Main References (Sources)		
1- Trial MF (2010) Elementary Statistics, ✓ Eleventh edition. Addison-Wesley.					
2- Wayne WD (2010) Biostatistics. John ✓ Wiley & Sons, INC.					
3- Introduction to Statistics Khashi Al-Rawi					

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



Academic Course Description

2025

1- Course name					
Health Management					
2- Course Code					
CH324					
3- Semester / Year:					
2024					
4- Description Preparation Date:					
17-9-2024					
5- Available Attendance Forms:					
Weekly					
6- Number of Credit Hours (Total) / Number of Units (Total)					
2 (theory) 0 (practical)/ 2 unit					
7- Course administrator's name (mention all, if more than one name)					
Assist. Lecturer :- Essam Najim Abed					
8- Course Objectives					
1- Learn about health management methods and objectives 2- Understand the meaning of healthy behavior and who a health educator is. 3- Formulate health education messages for various segments of society. 4- Understand various health education methods.					
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. - Education strategy through training and presenting scientific developments.			
10- Course Structure					
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.	Health Managment	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	2	15

	Observation Chain Education Strategy. Opinion Exchange and Discussion Education Strategy. Information Presentation Education Strategy. Training and Presenting Scientific Updates Education Strategy.		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.		
		Health behavior and education			1
		-Meaning of health education - Who is a health educator			2
		- Role of health education, - -Health behavior			3
		People working with people (skill)			4
		Relationship, Communication			5
		Avoid prejudice and bias			6
		Planning for HE			7
		Planning for HE			8
		individual health educate			9
		Health education with groups: what is group () (formal and informal purpose of formal group			10
		behavior of formal group, value of group education			11
		Health education with communities what is community			12
		identifying community when is community health education needed			13
		Endocrine toxicology			14
		Communicating the health messages methods & and media (formal)			14
		Communicating the health messages methods & and media (formal)			15

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



Academic Course Description

2025

Course Description Form

1- Course name					
Health Survey					
2- Course Code					
CH323					
3- Semester / Year:					
2024					
4- Description Preparation Date:					
16-9-2024					
5- Available Attendance Forms:					
Weekly					
6- Number of Credit Hours (Total) / Number of Units (Total)					
2 (theory) 4 (practical) / 4 units					
7- Course administrator's name (mention all, if more than one name)					
Assistant. lecturer: Zahraa Ahmed Abd zahraashebany@gmail.com					
8- Course Objectives					
General objective: To provide students with a comprehensive understanding of health surveys, including their purpose, design, data collection methods, and application in assessing and improving community health. Specific Objective: The student will be able to: 1- Define primary data. 2-Describe the purposes and uses of primary data in community health assessment. 3-Discuss the different methods for obtaining community data.					
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. • Education strategy through training and presenting scientific developments.			
10- Course Structure					
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		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	2	1

	and Discussion Education Strategy. Information Presentation Education Strategy. Training and Presenting Scientific Updates Education Strategy.	Introduction in health survey, health system, Sources of health data	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.		
=	=	Analyzing and Interpreting Community Health Data & Prioritizing Health Issues	=	2	2
=	=	Current Issues in Community Health Assessment and Improvement	=	2	3
=	=	Developing a Community Health Improvement and Assessment Plan to Address the Health Effects of the Built Environment.	=	2	4-5
=	=		=	2	
=	=	Community Health Improvement Framework and Health and Its Determinants	=	2	6-7
=	=	Assessing Community Health Status through the Use of Primary Data	=	2	8-9
=	=	Assessing Community Health Status using Surveillance Systems and Secondary Data	=	2	10-11
=	=	Analyzing and Interpreting Community Health Data & Prioritizing Health Issues	=	2	12-13
=	=	Developing a Community Health Improvement and Action Plan to Address the Health Effects of the Built Environment	=	2	14-15

10-Course structure (practical)

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	Introduction in health survey, health system,	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	4	1

	Presentation Education Strategy, Training and Presenting Scientific Updates Education Strategy.	Sources of health data	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.		
=	=	Analyzing and Interpreting Community Health Data & Prioritizing Health Issues	=	4	2
=	=	Current Issues in Community Health Assessment and Improvement	=	4	3
=	=	Developing a Community Health Improvement and Assessment Plan to Address the Health Effects of the Built Environment	=	4	4-5
=	=		=	4	
=	=	Community Health Improvement Framework and Health and Its Determinants	=	4	6-7
=	=	Assessing Community Health Status through the Use of Primary Data	=	4	8-9
=	=	Assessing Community Health Status using Surveillance Systems and Secondary Data	=	4	10-11
=	=	Analyzing and Interpreting Community Health Data & Prioritizing Health Issues	=	4	12-13
=	=	Developing a Community Health Improvement and Action Plan to Address the Health Effects of the Built Environment	=	4	14-15

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)	Community Health Services: Principles and Practices
-Main references (sources)	Essentials of Public Health Research
Recommended books and references (scientific journals, reports...)	American Journal of Public Health BMC Public Health The Lancet Public Health

Electronic References, Websites

World Health Organization (WHO) – who.int
Centers for Disease Control and Prevention (CDC) – cdc.gov
Community Health Assessment Clearinghouse – health.ny.gov
Google Scholar – scholar.google.com

Ministry of Higher Education and Scientific Research

Scientific Supervision and Scientific Evaluation

Apparatus

Directorate of Quality Assurance and Academic

Accreditation

Accreditation Department



Academic Course Description

2025

Course Description Form

Course Name:	
Communicable diseases	
Course Code:	
CH412	
Semester / Year:	
2024	
Description Preparation Date:	
16-9-2024	
Available Attendance Forms:	
Number of Credit Hours (Total) / Number of Units (Total)	
6\8	
Course administrator's name (mention all, if more than one name)	
Name: Dr.Zeena Kareem Gihad	
Email: zina.jehad@atu.edu.iq	
Course Objectives	
Course Objectives	General objective: The student learns about the most important transmissible diseases and ways to control them. Special objective: To be able to delve into the areas of the spread of communicable diseases and their methods of transmission - methods of controlling them - measuring the rate of spread of the disease.
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. Education strategy through training and presenting scientific developments.

Course Structure

Week	Hours	Required Learning	Unit or subject name(Theoretical)	Learning method	Evaluation method
1	2	Required learning outcomes: 1. Raising the level of motivation for learning various types: internal motivation, social motivation and achievement motivation. 2. Encouraging self-direction and independent learning where students can take responsibility for their learning and have the ability to manage their academic progress. 3. Creating opportunities to implement a collective planning approach to curriculum, and for collaboration among faculty members to identify gaps and respond to them. 4. Helping the students understand that decisions related to curricula and educational environment are rational. 5. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the students understand accountability and the quality of academic programs.	Sexually transmitted diseases and syphilis.	Cooperative education strategy Teaching strategy brainstorming Education strategy collaborative concept planning. Education strategy real-time feedback Education strategy notes sharing Education strategy by exchanging opinions and discussion. Education strategy by presenting information. Education strategy through and presenting scientific developments.	Daily exams Oral and written discussions
2		=	Gonorrhea	=	=
3-4		=	Diarrheal diseases; Diarrhea caused by E.coli	=	=
5		=	Acute Rota viral enteritis	=	=
6-7		=	Acute Rota viral enteritis	=	=
8-9		=	Food poisoning, staphylococcus, B. cereus, Shigellosis, enteric fever	=	=
10		=	Epidemic viral Gastroenteritis	=	=
11		=	Campylobacter enteritis	=	=
12-25		=	Candidiasis; Dermatophytosis; Giardiasis; Amoebiasis; fever Leishmaniasis; Malaria; Toxoplasmosis; pediculosis Scabies; Teniasis Bilharziasis; Ascariasis Hydatid diseases	=	=
26		=	Ancylostoma	=	=
27		=	Pin worm	=	=
28-30		=	Review of important topics	=	=
Week	Hours	Required Learning	Unit or subject name(practical)	Learning method	Evaluation method

1-4		1. Raising the level of motivation for learning various types: internal motivation, social motivation and achievement motivation 2. Encouraging self-direction and independent learning where students can take responsibility for their learning and have the ability to manage their academic progress 3. Creating opportunities to implement a collective planning approach to curriculum, and for collaboration among faculty members to identify gaps and report 4. Helping the students to understand that decisions related to curricula and educational environment are rational 5. Promoting the philosophy of follow-up and continuous improvement. 6. Helping the students to understand accountability and the quality of academic performance	Concept of preventive general	Cooperative education Teaching strategy brain Education strategy concept planning. Education strategy feedback Education strategy not Education strategy exchanging opinion discussion. Education strategy by information. Education strategy training and presenting developments.	Daily exams Oral and written discussions.
5	=		Visit to CDC to see, of leishmaniasis in Iraq	=	=
6	=		Prevention of malaria	=	=
7	=		Prevention of bilharzia Iraq	=	=
8	=		Prevention of toxoplasmosis Iraq	=	=
9	=		Prevention of hemophilia Iraq	=	=
10-15	=		Visit to T.B. institute policy of DOTS program	=	=
16-22	=		Surveillance of diseases	=	=
23-26	=		Investigation of an epidemic	=	=
27-30	=		Outbreak investigation	=	=
Course Evaluation					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, monthly, or written exams, reports etc					
Learning and Teaching Resources					
Required textbooks (curricular books, if any)			Review of Preventive and Social Medicine Case studies in infectious disease Lippincott's guide to infectious disease Communicable Disease Control and Health Protection Handbook		
Main references (sources)			1. Abraham S. Benenson, 1995, Control of Communicable Diseases Manual, 16th edition, An Official Report of the American Health Association, The United Book Press, Inc, Baltimore 2. Davidson, S., 1999, Principles and Practice of Medicine 19th edition, Harcourt, Edinburgh, London.		

	3. Donowitz, 1996, Infection Control in the Child Care Center and Preschool, 3rd edition, Williams Wilkins, USA. 4. Eshuis-Manshot, 1978, Communicable Diseases: A Manual for Rural Health Workers, African Medical and Research Association, Nairobi. 5. Harrison, S., 1998, Principles of Internal Medicine, 14th edition, McGraw-Hill, U.S.A 6. Hegazi M. 1994, Applied Human Parasitology, 1st edition, Scientific Book Centers, Cairo. 7. Kozier, et al, 1995, Fundamentals of Nursing, 5th edition, Addison - Wesley, U.S.A 8. Madeleine Fletcher, 1992, Principles and Practice of Epidemiology, Addis Ababa University, Ethiopia. 9. Meseret Shiferaw, Haile Tena, 1990, A Manual for Student Health Workers, Ministry of Health, Ethiopia. 10. Ministry of Health, 1997, Manual of National Tuberculosis and Leprosy Control Program, 1st 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 acquisition 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 finding the science career for you • Microbiology Society Membership organization for scientists who work in microbiology. Largest in Europe. • Society for Industrial Microbiology "Nonprofit, international association dedicated to the advancement of microbiological sciences, especially those that apply to industrial products, biotechnology, material processes".