جمهورية العراق
وزارة التعليم العالي والبحث العلمي جهاز الاشراف والتقويم العلمي
قسم الاعتماد/دائرة ضمان الجودة والاعتماد الاكاديمي
المجلس الوطني لاعتماد برامج كليات ومعاهد التقنيات الصحية والطبية

ACADEMIC PROGRAM DESCRIPTION FORM

University Name: Al-Furat Al-Awsat Technical University

Faculty/Institute: Polytechnic College / Karbala

Scientific Department: Community Health Technologies Department.

Academic or Professional Program Name: Community Health Technologies

Final Certificate Name: Technical diploma

Academic System: Semester study system

Description Preparation Date: 28/12/2025

File Completion Date: 28/12/2025

Signature:
Head of Department Name:
Assist.Prof.Dr. Mohammed Abdulridha Merzah
Date:

Signature:
Scientific Associate Name:
Assist.Prof.Dr. Mohammed Fadhil Neamha
Date: 10-5-2026

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Assist.Prof.Ali Neamah Hasan AL-Aaragi
Date:

10-5-2026
Approval of the Dean

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 For Community Health Department

FIRST SEMESTER

2025-2026

Introduction:

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

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

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies

T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

*** Concepts and terminology:**

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

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

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

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

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

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

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

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

Program Vision

Providing graduates with the necessary knowledge and experience in the fields of work in the fields of (occupational health and safety, health inspection and control), assisting in the implementation of primary health control programs and health awareness campaigns, and assisting the doctor in diagnostic procedures in programs implemented in health centers. Thus, the graduate will be qualified, acquire scientific and practical skills, and have an impact. Positive development of the public and private health sector and spreading awareness in the areas of public health in society.

Program Mission

Achieving excellence in teaching and education, acquiring scientific skills, and implementing educational and training programs and research activities, which leads to enhancing the high capacity in diagnosing various diseases and developing preventive and curative health services so that they are accessible to all members of society.

Program Objectives

The department aims to…

1. Health inspection and control teams and assist in laboratory investigation of the examined samples and their compliance with health conditions.
2. Occupational health and safety field
3. Implementing primary health care programs.
4. Health survey teams and health awareness campaigns.
5. Assisting the doctor in diagnostic, nursing, and therapeutic procedures during the implementation of health programs.
6. Operating and caring for used medical equipment and machines used in diagnosis and treatment.
7. Survey teams on communicable diseases and how to control them.

Program Accreditation

The established programs are accredited by the Ministry of Higher Education and Scientific Research/Al-Furat Al-Awsat Technical University.
In addition to the World Health Organization WHO.

Other external influences

- Scientific research related to the department's specialty.
- The World Wide Web (the Internet).
- Regular and digital libraries.
- Summer training in government hospitals.

Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	1	2	2.9%	Nothing
College Requirements	3	6	8.8%	Nothing
Department Requirements	14	60	88.3%	Nothing
Summer Training	Two months	/	/	Nothing
Other	Nothing	Nothing	Nothing	Nothing

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

Program Description

Year/Level	Course Code	Course Name	Credit Hours		
			Theoretical	Practical	All
First semester	T.C.H	Community Heath Technologies	15	16	31
Second Semester	T.C.H	Community Heath Technologies	16	16	32
First semester	T.C.H	Community Heath Technologies	14	20	34
Second Semester	T.C.H	Community Heath Technologies	14	20	34

Expected learning outcomes of the program

Knowledge

A- Cognitive objectives

1. Assistance in laboratory and epidemiological investigations.
2. Assisting the doctor in diagnostic and therapeutic nursing procedures during the implementation of the program.
3. Operating and caring for used medical equipment.
4. Managing primary health care centers according to the units within the health center.
5. Implementing surveys on communicable diseases and how to control them.

Skills

B- The program's skill objectives

1. Working in the field of occupational health and safety.
2. Working in emergency rooms and emergency medicine.
3. Health inspection and control.
4. Health education and the art of prevention and control of communicable and non-communicable diseases.

Ethics

Learning Outcomes 4	Learning Outcomes Statement 4
Learning Outcomes 5	Learning Outcomes Statement 5

Teaching and Learning Strategies

- Cooperative education strategy.
- Brainstorming education strategy.
- Educational strategy, collaborative concept planning.
- Strategy education real-time feedback
- Education strategy notes series.
- Education strategy by exchanging opinions and discussion.
- Educational strategy by presenting information.

10. Evaluation methods

1- Daily exams.
2- Quarterly exams
3- Final exams.
4- Practical projects.
5- Laboratory reports.

1. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor	Veterinary medicine and surgery	Preventive internal medicine	-	-	1	-
	Community health technologies	Community health technologies	-	-	1	-
Assistant Professor	Veterinary medicine and surgery	Preventive internal medicine	-	-	1	-
	Community health technologies	Community health technologies	-	-	4	-
	Life sciences	Medical microbiology	-	-	1	-
	Chemistry	Clinical biochemistry	-	-	1	-
Lecturer	Nursing sciences	Maternal and newborn health	-	-	1	-
	Veterinary medicine and surgery	Medical physiology	-	-	1	-
	Community health technologies	Community health technologies	-	-	-	-
	Biological analyses	Medical microbiology	-	-	1	-
Assistant Lecturer	Biology	Biology	-	-	1	-
	Veterinary medicine and surgery	Medical microbiology	-	-	3	-
	Political science	International relations	-	-	1	-
	Biology	Environment	-	-	1	-
	Biostatistics	Biostatistics	-	-	1	-
Contracted	Veterinary medicine and surgery	Medicines and toxins	-	-	1	-

Professional Development

Mentoring new faculty members

• Encourage them to participate in specialized courses within their specialty.
• Participation in holding seminars, workshops, and training programs.
• Participation in teaching methods courses to acquire different skills and methods in teaching.

Professional development of faculty members

• Continuous development of teaching capabilities in a manner consistent with cognitive development in the field of specialization.
• Developing the educational system so that it rises to high quality and solid specifications and supports innovation and creativity to serve society.
• Encouraging the participation of teachers in scientific programs and specialized courses and giving lectures in corresponding institutes and colleges to enhance academic and professional partnerships with reputable universities and institutions.

Acceptance Criterion

According to the controls specified by the Ministry of Higher Education and Scientific Research through the central admission portal and the special controls for admission to colleges and institutes approved by the Ministry, provided that the student holds a preparatory certificate in the scientific/biological stream exclusively."

The most important sources of information about the program

• Methodical books, scientific lectures by professors, scientific portfolios, scientific research and theses within the specialty, the Internet.
• Official website of the Polytechnic College / Karbala https://ikr.atu.edu.iq

Program Development Plan

• Applied education in health institutions.
• Using modern means of communication such as the Internet and others.
• Using modern means of illustration and advanced laboratory equipment.
• Conducting scientific conferences for the institute or student conferences within the institute or with the participation of corresponding institutes.
• Scientific seminars and quarterly seminars for the department.
• Establishing specialized workshops for graduate and continuing students by professors.

Program Skills Outline

Year/ Level	Course Code	Course Name	Basic or optional	Required program Learning outcomes											
				Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
The first/first semester	C.H.	Community health	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	F.N.	Fundamental Nursing1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	G.A.	General anatomy1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	Ph.	Physiology1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	M.Mic.	Medical microbiology1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	Bio.	Biostatistics1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	C.Ch.	Biochemistry1	Assistance	√	√	√	√	√	√	√	√	√	√	√	√
	C.A.	Computer applications1	Assistance	√	√	√	√	√	√	√	√	√	√	√	√
	H.R.D.	Human rights and democracy	General	-	-	-	-	-	-	-	-	-	-	-	-
First/second semester	S.H.	School health	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	F.N.	Fundamental Nursing2	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	G.A.	General anatomy2	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	Ph.	Physiology2	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	M.Mic.	Medical microbiology2	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√

	Bio.	Biostatistics2	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	C.Ch.	Biochemistry2	Assistance	√	√	√	√	√	√	√	√	√	√	√	√
	Eng.	English	General	-	-	-	-	-	-	-	-	-	-	-	-
	Pha.	Pharmacology1	Assistance	√	√	√	√	√	√	√	√	√	√	√	√
	Pro.	Research project	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	c.o	Computer applications2	Assistance	√	√	√	√	√	√	√	√	√	√	√	√
	P.E	Professional Ethics	Assistance	-	-	-	-	-	-	-	-	-	-	-	-
Second/first semester	C.H.	Community Health	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	H.I.	Health inspection1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	M.S.	Medicine & Surgery1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	H.O.S	Occupational health and safety1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	Epi.	Epidemiology1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	E.H.	Environmental Health1	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√
	Pha.	Pharmacology1	Assistance	√	√	√	√	√	√	√	√	√	√	√	√
	Cr.	Baath crimes	Assistance	-	-	-	-	-	-	-	-	-	-	-	-
Second/	I.H.	International Health	Specialized/basic	√	√	√	√	√	√	√	√	√	√	√	√

second semester	**H.I.**	**Health inspection1**	**Specialized/basic**	√	√	√	√	√	√	√	√	√	√	√	√
	M.S.	**Medicine & Surgery1**	**Specialized/basic**	√	√	√	√	√	√	√	√	√	√	√	√
	H.O.S	**Occupational health and safety1**	**Specialized/basic**	√	√	√	√	√	√	√	√	√	√	√	√
	Epi.	**Epidemiology1**	**Specialized/basic**	√	√	√	√	√	√	√	√	√	√	√	√
	Pha.	**Pharmacology1**	**Assistance**	√	√	√	√	√	√	√	√	√	√	√	√
	Pro.	**Research project**	**Specialized/basic**	√	√	√	√	√	√	√	√	√	√	√	√
	P.E	**Professional Ethics**	**Assistance**	-	-	-	-	-	-	-	-	-	-	-	-

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

COURSE DESCRIPTION FORMS FOR THE FIRST YEAR

* Community health:

Academic course description for the academic year 2025-2026 AD for the subject (Principles of Community Health) Department of Community Health Technologies Stage (First) Semester (First).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	Principles of Community Health
1.Course Instructor:	Assistant Professor Ali Neamah Hasan Al-Aaraji Assistant Teacher Aya Fadel Kanin
5.Available Attendance Forms	Karbala Polytechnic College - Department of Community Health Technologies
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	2 Theory + 3 Practical
8.Date of Preparation of this Description	November 17, 2025

9.Course Objectives: By the end of the course, the student will be able to:

(a) Recognize the importance of basic health services provided at a primary healthcare center.
(b) Differentiate between the levels of primary healthcare.
(c) Differentiate between the health services provided at a primary healthcare center and those provided at hospitals ion.
d) Lists the benefits of breastfeeding for the mother, child, and society.
e) Recognizes the causes, symptoms, and complications of breast cancer and methods of prevention.

9 .Objectives: The student will be able to identify:

1. Health services provided to mothers and children.
2. Childhood illnesses to which children are exposed.
3. Risk factors for pregnant women.

4. Vaccinations given to children from birth until school age. 5. Vaccinations given to women of childbearing age.
B - Course Skills Objectives: Students will be able to: 1. Complete health cards for women of reproductive age and pregnant women. 2. Complete health cards for children and fill out birth certificates. 3. Administer vaccinations to women and children. 4. Preparing and administering oral rehydration solution for children with diarrhea. 5. Identifying the type of diarrhea, the degree of dehydration, and how to manage it.
C. Affective and Value-Based Objectives: The student will be able to: 1. Prepare a comprehensive lecture in the field of community health. 2. Deliver a lecture within their specialization to students in the lecture hall. 3. Deliver a lecture within their specialization to the community, utilizing health education skills, on a health problem in the community. 4. Prepare health reports and scientific posters, and deliver seminars.
D - General and transferable skills (other skills related to employability and personal development):
*** Teaching and Learning Methods:** 1. Utilizing modern methods through presentations (PowerPoint) in addition to using the classroom whiteboard. 2. Enhancing lectures through YouTube and other online programs, and showing educational videos. 3. Focusing on practical skills through field visits and summer training.
*** Assessment Methods: Students are assessed through:** 1. Daily exams (oral and written). 2. Preparing academic reports and participating in student discussions. 3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	2 Theory + 3 Practical	Primary Health Care	Healthy Humidity Levels	PowerPoint + Whiteboard + Video	Oral Exam
2	2 Theory + 3 Practical	Primary Health Care	Primary Health Care	PowerPoint + Whiteboard + Video	Written Exam
3	2 Theory + 3 Practical	Primary Health Care	Primary Health Care Programs	PowerPoint + Whiteboard + Video	Seminar Preparation
4	2 Theory + 3 Practical	Maternal and Child Health Care	Maternal and Child Health Care	PowerPoint + Whiteboard + Video	Written Exam
5	2 Theory + 3 Practical	Maternal and Child Health Care	Risk factors for pregnant	PowerPoint + Whiteboard +	Oral Exam

			women	Video	
6	2 Theory + 3 Practical	Maternal and Child Health Care	Child health	PowerPoint + Whiteboard + Video	Written Exam
7	2 Theory + 3 Practical	Immunity and Vaccines	Reproductive health program	PowerPoint + Whiteboard + Video	Seminar Preparation
8	2 Theory + 3 Practical	Immunity and Vaccines	Vaccines	PowerPoint + Whiteboard + Video	Oral Exam
9	2 Theory + 3 Practical	Required Learning Outcomes	Expanded Immunizatio n Program	PowerPoint + Whiteboard + Video	Written Exam
10	2 Theory + 3 Practical	Communicable Diseases	Childhood diseases	PowerPoint + Whiteboard + Video	Seminar Preparation
11	2 Theory + 3 Practical	Communicable Diseases	Symptoms of childhood diseases	PowerPoint + Whiteboard + Video	Oral Exam
12	2 Theory + 3 Practical	Child Nutrition	Breastfeeding	PowerPoint + Whiteboard + Video	Written Exam
13	2 Theory + 3 Practical	Childhood Diseases	Diarrhea in children	PowerPoint + Whiteboard + Video	Seminar Preparation
14	2 Theory + 3 Practical	Cancers	Breast cancer	PowerPoint + Whiteboard + Video	Oral Exam
15	2 Theory + 3 Practical	Immunity and Vaccines	Non-mandatory vaccinations	PowerPoint + Whiteboard + Video	Written Exam

11. Infrastructure:	
1. Required Textbooks	
2. Main References (Sources)	Guide for Staff in the Expanded Program on Immunization – Iraqi Ministry of Health – 2014 National Guide for Newborn Screening – Iraqi Ministry of Health – 2014 Integrated Child Health Care – Iraqi Ministry of Health – 2012 Field Guide for Flaccid Paralysis – Iraqi Ministry of Health – 2013 National Program Guide for Early Detection of Breast

	Cancer 2018
a. Recommended Books and References (Scientific Journals, Reports, etc.)	Comprehensive Medical Textbook: Community Health Nursing – World Health Organization 2006 National Breast Cancer Screening Program Guide for Health Workers – 2018 Breast Cancer, Professor Mike Dixon, 2013
b. Electronic Resources, Websites	http://phciraq.org www.usaid.gov http://www.cdc.gov/std/default.htm

12. Curriculum Development Plan:

The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:

1- Breast Cancer

2- Acquired Immunodeficiency Syndrome (AIDS)

3. Respiratory infectious diseases (seasonal influenza): Vaccines used for prevention.

4. Respiratory infectious diseases (coronavirus): Vaccines used for prevention.

*Fundamental Nursing:

Academic course description for the academic year 2025-2026 AD for the subject (Name of subject) Department of Community Health Technologies Stage (First or Second) Semester (First or Second).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	**T.C.H**
2.Course Instructor:	**Dr. Najat Hamza Hassan**
5.Available Attendance Forms	**Attendance**
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	**(2) Theory + (3) Practical**
8.Date of Preparation of this Description	**20/ 12 /2025**

9.Course Objectives: By the end of the course, the student will be able to:

know the general information about Nursing

Specific objective :

- History of Nursing , Nursing , Nurse , Hospital its department , health agency in Iraq .
- Vital signs , Temperature , Respiration , Blood pressure & its methods.
- Administration of Medication as general ,& storage of drugs .
- Methods of giving O2, section the recreation from chest, Arterial respiration Mouth to Mouth.
- Normal feeding & gastric Laval.
- Physical examination & Laboratory test .
- Pre-post-operative care.
- First aid & Civil defiance.
- Make practices in collection sample.
- First aid in nursing procedures in case of fractures, wounds, bleeding , burns, poisoning,

shock.

1. Objectives: The student will be able to identify:

1. First aid in laboratories
2. Documenting patient records and writing medical reports
3. Understanding the nursing process
4. Medical examination
5. Vital signs
6. Sterilization and disinfection
7. Types of dressings

B - Course Skills Objectives: Students will be able to:

1. Assisting in measuring vital signs (temperature, pulse, respiration, blood pressure).
2. Assisting the physician with diagnostic and therapeutic nursing procedures during the program.
3. Operating and maintaining the medical equipment used.
4. Administering medication and injections.
5. Dressing wounds.

C. Affective and Value-Based Objectives: The student will be able to:

1. Prepare a comprehensive lecture on the fundamentals of nursing.
2. Deliver a lecture within the specialty to students in the lecture hall.
3. Prepare health reports and scientific posters, and deliver seminars.

D - General and transferable skills (other skills related to employability and personal development):

1. Effective communication skills
2. Ability to analyze clinical cases and make quick decisions.
3. Time management and organizational skills for performing nursing tasks.

*** Teaching and Learning Methods:**

1. Direct questions and answers regarding the lecture topic.
2. Group discussions to explore specific topics and enhance students' cognitive and critical thinking skills.
3. Integrating theoretical lectures with practical exercises.
4. Involving all students in practical lab activities such as measuring temperature, blood pressure, respiration, pulse, and various types of glaucoma, as well as wound dressing and first aid, including artificial respiration.
5. Utilizing modern teaching methods, including PowerPoint presentations and the classroom whiteboard.

*** Assessment Methods: Students are assessed through:**

1. Daily exams (oral and written).
2. Preparing academic reports and participating in student discussions.
3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	5	The student's ability to know first aid in laboratories, personal protection methods, and define some basic nursing terms (nursing, nurse, health, hospital)	First aid in laboratories and Personal protective equipment , Fundamental of Nursing , definition (Nursing , Nurse, health, Hospital.(	PowerPoint + Whiteboard + Video	Oral Exam
2+3	5	The student learns how to admit a patient to the hospital and how to discharge them upon recovery. They also learn how to write oral and written reports and the nursing process through which patient care is provided, which consists of four stages: assessment, planning, implementation, and evaluation.	Administration & discharge of patient from hospital, pt.chart , oral report, written of report , Nursing process.(Assessing , planning , Implementation , Evaluation).	PowerPoint + Whiteboard + Video	Written Exam
4+5	5	The student learns the role of the nurse in preparing the patient for a clinical examination, how to collect samples from the patient for the purpose of sending them to the laboratory, and the necessary tools for this.	Physical examination, prepare the pt. to exam, role of Nurse in physical examination , collection of sample ,prepare the equipment .	PowerPoint + Whiteboard + Video	Seminar Preparation
6	5	The student learns the appropriate patient positions for each clinical examination or treatment purpose, how to lift the	Position of patient, patient lifting and its risks.	PowerPoint + Whiteboard + Video	Oral Exam

		patient, and their risks.			
7+8	5	The student learns about the basic needs of the patient and their care in terms of bed arrangement and personal hygiene, patient bathing, oral and dental hygiene, and bedsores: their causes and prevention methods.	Basic Needs of Pt. care of Pt. unit , bed making , personal hygiene patient bath, mouth and tooth care. Bed sores, care of sores, causes & prevention of bed sores.	PowerPoint + Whiteboard + Video	Oral Exam
9+10	5	The student learns about sterilization and disinfection methods, wound dressings, types of sterilization of surgical instruments, principles of dressing, and suture removal.	Method of sterilization, surgical sterilization , Medical sterilization , kind of disinfectant,	PowerPoint + Whiteboard + Video	Written Exam
11+12	5	The student's ability to recognize vital signs, define temperature and how to measure it, define fever, its signs and symptoms, and how to treat it. The student also learns what pulse, respiration, and blood pressure are, how to measure them, and the factors that affect them.	Dressing the wound , kind of sterilize of surgical equipment ,principle of Dressing & remove of stitches.	PowerPoint + Whiteboard + Video	Written Exam
13+14	5	The student learns how to administer medications to patients, starting with the definition of medication, its types, and the methods of	Vital signs, Definition of Temperature, check Temperature, Type of check Temp-	PowerPoint + Whiteboard + Video	Oral Exam

		administration: oral, intramuscular, intravenous, subcutaneous, cold and hot compresses, and oral and nasal drops.	oral,axllia, Rectal definition of fever , causes, signs, & symptom, Nursing care of pyrexia , pulse, definition, factors affecting of pulse , site of taking pulse, Nursing point in check pulse , Respiration , definition of respiration, definition of Blood pressure. definition of diastolic & systolic pressure.		
15	5	The student learns the purpose of blood transfusion and the most important considerations that must be taken into account during the blood transfusion process.	Drug administration , define of drug Type of administration of medication , and Injection , {I.M,I.V.,S.c,I .D,} cold & hot. Compress, nose eyes & ears drops.	PowerPoint + Whiteboard + Video	Written Exam

11. Infrastructure:	
1. Required Textbooks	Fuerst fundamenta1 of nursing
2. Main References (Sources)	1.Textbooks: Salwa Abbas, Principles of Nursing, Ministry of Health, Health Education Foundation, 1985. 2 .Supplementary Books: Nursing Fundamentals Manual, Salwa Abbas, Nazira Hussein, Sarah Dankha, Ministry of Higher Education, Technical Institutes Authority, 1989.

	Ahlam Faraj, Elham Amin, Basic Principles of Nursing, Ministry of Higher Education and Scientific Research, 1986.
a. Recommended Books and References (Scientific Journals, Reports, etc.)	Fundamentals of Nursing
b. Electronic Resources, Websites	**1.** Miller-Rosser, K., Chapman, Y., Francis, K. (July 19, 2006): "Historical, Cultural, and Contemporary Influences on the Status of Women in Nursing in Saudi Arabia". OJIN: The Online Journal of Issues in Nursing. Vol. 11, No. 3. 2. Al-Hassani, Salin TS. "Women's Contribution to Classical Islamic Civilisation: Science, Medicine, and Politics". Muslim Heritage. Retrieved 24 November 2013. 3. Kasule, O. H. (2003). Historical roots of the nursing profession in Islam. Retrieved June 2004. 4 .Charles P. D: Hospital Admissions Introduction, eMedicineHealth, 014. - American Nurses Association: The Nursing Process, 2003 . 5. Singh R: The Importance of Exercise as a Therapeutic Agent, Malays J Med Sci. 2002 Jul;9(2):7-16. 6.Beth W. O: A Guide to Good Personal Hygiene, Everyday Health, 2000 . 7. National Center for Complementary and Integrative Health: Massage herapy for Health Purposes, 2010. 8. Gil Wayne, RN , Pharmacology: Essential Principles and Drug Administration (20 Items), Mar 3, 2015 . 9. World Health Organization : WHO best practices for injections and elated procedures toolkit, , 2010. 10. Avoid complications with pediatric burn injuries.” ED Nursing 1 May 8. Academic OneFile. Web. 20 Dec. 2014. 11. Daya CH: Asphyxia : Definition, Causes, Pathophysiology, mptoms, Signs, & Treatment, March 20, 2017. 12. How Is Sudden Cardiac Arrest Treated?". NHLBI. June 22, 2016 . 13. British Heart Foundation: Cardiac arrest, Definition. Aug 4, 2015.

12. Curriculum Development Plan:

The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:

1. Artificial intelligence applications in nursing care.
2. Digital documentation skills in electronic health records.

* General anatomy:

Academic course description for the academic year 2025-2026 AD for the subject (General Anatomy 1 +2) Department of Community Health Technologies Stage (First stage) Semester (First and Second).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala
2.Department/Center	Community Health Technologies
3.Course Name/Code	**A107**
1. Course Instructor:	Prof. Zahra Makki Mahmoud
5.Available Attendance Forms	In-person attendance
6.Semester/Year	**First Semester + Second Semester /** 2025-2026
7.Total Credit Hours	2 Theory + 2 Practical
8.Date of Preparation of this Description	16 / 12 / 2025

9.Course Objectives: By the end of the course, the student will be able to:
1. Differentiate between a cell, a tissue, an organ, and a system.
2. Name each organ of the body.
3. Know the name of each system of the body and its composition.
4. Identify the location of each organ within the body cavities.
5. Identify the positions of organs relative to the external surface of the body.
6. Describe the shape of each organ.
7. Understand the relationship of each organ of the body system to the other organs of the same system.
8. Understand the relationship of each organ of the body to the organs of other body systems.

A. Objectives: The student will be able to identify:
Course Outcomes, Teaching and Learning Methods, and Assessment:
The Anatomy course contributes to preparing graduates who possess a fundamental knowledge of the normal anatomical structure of the human body and its connection to functional and health

aspects, thus qualifying them to work in community health technologies.
Cognitive objectives: By the end of the course, the student will be able to:
1. Define anatomy.
2. Differentiate between a cell, a tissue, an organ, and a system.
3. Name each organ and each system in the body.
4. Identify the location of each organ within the body cavities.
5. Recognize the positions of organs relative to the external surface of the body.
6. Describe the shape and function of each organ in the human body.
7. Understand the relationship of each organ within a system to the other organs of that same system.
8. Understand the relationship of each organ within a system to the organs of other body systems.

B - Course Skills Objectives: Students will be able to:
1. Identify the location of pain, injury, or damage within the body in relation to external organs.
2. Make a preliminary diagnosis of pain in any organ or system of the body.
3. Identify and accurately apply treatment to specific areas.
4. Locate and alleviate pain until reaching a hospital or specialist.

C. Affective and Value-Based Objectives: By the end of the course the student will be able to:
Prepare a lecture on anatomy and participate in medical discussions concerning diseases of each .1
.body system
Provide reassurance and comfort to individuals experiencing pain, both in normal circumstances .2
.and during accidents
.Offer assistance in critical situations .3
Deliver a lecture or seminar explaining the importance and function of each organ and system .4
.within the body

D - General and transferable skills (other skills related to employability and personal development):
By the end of the course, the student will be able to:
1. He is able to explain all parts of the body.
2. He is able to identify diseases affecting each body system and determine the malfunction in the corresponding organ.
3. He can direct someone experiencing pain in any organ to consult a specialist.
4. He can save lives by providing assistance in critical situations.

* Teaching and Learning Methods:
1. Lectures delivered using PowerPoint presentations.
2. Use of the whiteboard when needed.
3. Use of images (flex banners) for clarification.
4. Use of a skeletal structure.
5. Use of illustrative models.
6. Screening of educational films.

* Assessment Methods: Student evaluation is based on:
1. Student attendance, participation, and interaction in lectures.
2. Daily quizzes (oral and written).
3. Monthly written theoretical assessments.
4. Assigning and discussing research papers.
5. Conducting and discussing seminars with students.

6. Student participation in field trips. 7. Midterm and final exams.

10. Course structure:

First Semester

Weeks	**Hours**	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	4	What is Anatomy, the Anatomical Position, Surgical Sections, and Anatomical Terminology?	Introduction and definition of anatomy , surface anatomy of the body , anatomical position , median plane .	Using PowerPoint, visual aids, scientific films, the skeleton, mannequins, and model	Attendance and participation in lectures, oral and written exams.
2	4	Anatomical and Surgical Sections, Abdominal Regions, and Anatomical Terminology.	Surface anatomy : planes and vertical lines	Using Power Point, visual aids, scientific films, the skeleton, mannequins, and model	Attendance and participation in lectures, oral and written exams.
3	4	Definition of the Cell and Tissues, the Difference Between a Cell and a Tissue.	Tissues and cells: Types of cells which formdifferent types of tissues,e.g. :epithelial,connective ,muscular, nervous tissues . etc.	Using Power Point + Visuals + Scientific Films	Attendance and participation in lectures, oral and written exams.
4	4	What are the Types of Tissues?	Bone and joints : types of bones , functions of bones , parts of skeleton	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.
5	4	Understanding Bones and Joints, Their Types, and Their Functions.	Skeleton of upper limb : general anatomical appearance ,skeleton of shoulder girdle : clavicle , scapula, humerus , radius, ulna , skeleton of the hand .	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.
6	4	Understanding the Skeletal Structure of The Upper Limb in All Its Parts (Shoulder Girdle, Arm Region,	Skeleton of lower limb : general anatomical appearance, skeleton of the pelvis : hip bones : Ilium ,	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.

		Forearm Region, Hand Region).	pubis , ischium . femur. Leg :tibia, fibula. Skeleton of the foot		
7	4	Understanding the Skeletal Structure of the Lower Limb in All Its Parts (Pelvic Girdle and Its Constituent Bones, Thigh Region, Leg Region, Foot Region).	Trunk skeleton : thorax : sternum , rips .	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.
8	4	Understanding the Description of the Skull Skeleton and Its Components.	Skull : general appearance .	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.
9	4	Understanding the Skeletal Structure of the Cranial Vault and Mandible.	Cranium , lower jaw	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.
10	4	Understanding the Skeletal Structure of the Vertebral Column.	Vertebral column : the types of vertebra of each part.	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.
11	4	Understanding Joints and Their Types.	Joints : definition , types	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.
12	4	Understanding the Joints of the Upper Limb, Lower Limb, and Trunk.	Joints of upper and lower limb and trunk	Using Power Point + Visuals + Scientific Films + Skeleton	Attendance and participation in lectures, oral and written exams.
13	4	Identifying the Types of Human Body Muscles and the Importance of the Head and Eye Muscles.	Muscular system : types of muscles , muscles of head and face , general information	Using Power Point + Visual Aids + Scientific Films + Dolls and Skeleton	Attendance and participation in lectures, oral and written exams.
14	4	Understanding the Muscles of the Upper Limb that Connect It to the Spine, Shoulder Region, Arm, Forearm, and Hand	Muscles of upper limb : limbo vertebral muscles , limbo thoracic muscles , muscles of the shoulder , muscles of upper arm, muscles of hand	Using Power Point + Visual Aids + Scientific Films + Dolls and Skeleton	Attendance and participation in lectures, oral and written exams.

15	4	Understanding the Muscles of the Lower Limb (Iliac and Gluteal Region Muscles, Thigh Region Muscles).	Muscles of the lower limb : muscles of the iliac region , muscles of the gluteal region , muscles of thigh	Using Power Point + Visual Aids + Scientific Films + Dolls and Skeleton	Attendance and participation in lectures, oral and written exams.
Second Semester					
Weeks	**Hours**	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
First	**4**	Understanding the Muscles of the Foot Region.	Muscles of leg and foot	Giving lectures and using visual aids	Exams
Second	**4**	Understanding the Superficial and Deep Muscles of the Trunk, and the Muscles of the Abdominal and Back Regions.	Muscles of the trunk , muscles of the thorax (superficial and deep) ,muscles of the abdomen , muscles of the back	Giving lectures and using visual aids	Exams
Third	**4**	Understanding the Components and Parts of the Central Nervous System and the Structure of the Brain.	Nervous system : brain , cerebrum , cerebellum , brain stem	Giving lectures and using visual aids	Exams
Fourth	**4**	Understanding the Components of the Second Part of the Central Nervous System (Spinal Cord).	Spinal cord , ventricles of the brain	Giving lectures and using visual aids	Exams
Fifth	**4**	Understanding the Components and Function of the Peripheral Nervous System.	Peripheral nervous system , cranial nerves : numbers and functions	Giving lectures and using visual aids	Exams
Sixth	**4**	Definition and Anatomy of the Spinal Cord.	Spinal nerves	Giving lectures and using visual aids	Exams
Seventh	**4**	Understanding the Anatomy and Function of the Autonomic Nervous System.	Autonomic nervous system , parts and functions	Giving lectures and using visual aids	Exams
Eighth	**4**	Understanding the Parts and Anatomy of the Digestive System.	Digestive system : mouth and accessories ,Pharynx ,esophagus ,stomach	Giving lectures and using visual aids	Exams
Ninth	**4**	Understanding the Anatomy of the Cardiovascular System and the Types of Blood Vessels.	Cardio- vascular system, Blood vessels in general	Giving lectures and using visual aids	Exams
Tenth	**4**	Understanding Blood and the Heart.	Blood and heart	Giving lectures and using visual aids	Exams

Elevent	4	Understanding the Anatomy of Veins and Arteries.	Veins and arteries , systemic circulation arteries , thoracic aorta	Giving lectures and using visual aids	Exams
Twelfth	4	Understanding the Parts of the Abdominal Aorta.	Abdominal aorta and its branches	Giving lectures and using visual aids	Exams
Thirteen	4	Understanding the Anatomy of the Veins Supplying the Lower Limb and Abdominal Region.	Veins of the systemic circulation , veins of the lower limb , veins of the abdomen	Giving lectures and using visual aids	Exams
Fourteen	4	Understanding the Anatomy of the Veins and Arteries of the Head, Neck, and Pulmonary Circulation.	Veins of the head and neck , applied points , veins and arteries , pulmonary circulation	Giving lectures and using visual aids	Exams
Fifteent	4	Understanding the Anatomy of the Lymphatic and Respiratory Systems.	Lymphatic system and respiratory system	Giving lectures and using visual aids	Exams

11. Infrastructure:	
1. Required Textbooks	**1.Principle of anatomy , Dr. Hani T. Al-Azawi , 4th edition , 1988.** **2.Principle of anatomy , Dr. Abdul-Rahman M. Abdul- Raheim & Dr. Ali K.**
2. Main References (Sources)	**كتب التشريح ـ للدكتور سامح دوس**
a. Recommended Books and References (Scientific Journals, Reports, etc.)	**1-Anatomy: A Photographic Atlas.** **2- Gray's Anatomy.**
b. Electronic Resources, Websites	**الموقع الرسمي لكلية البوليتكنك / كربلاء** **(https://ikr.atu.edu.iq)** **https://openstax.org/details/books/anatomy–and– - physiology** **https://teachmeanatomy.info/ –**

12. Curriculum Development Plan:

We hope to develop and update the curriculum and course content based on the latest scientific advancements and the health challenges facing the country and the world. We propose adding the following lectures:

1. Functional Anatomy and its Relationship to Public Health
2. Anatomy Related to Common Community Diseases
3. Fundamentals of Anatomy Related to First Aid and Emergencies
4. Anatomy and Environmental Health and the Effect of Pollutants on Body Systems
5. Anatomy Related to Family, Maternal, and Child Health
6. Introduction to Preventive Anatomy and its Role in Disease Prevention

* Physiology:

Academic course description for the academic year 2025-2026 AD for the subject (Physiology) Department of Community Health Technologies Stage (First) Semester (First).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	**T.C.H**
3.Course Instructor:	**Dr.Shukrya Hatem Alwan**
5.Available Attendance Forms	**Presence**
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	**(2) Theory + (3) Practical**
8.Date of Preparation of this Description	**2025 /12/21**

9.Course Objectives: By the end of the course, the student will be able to:

1. Know the structure and function of each organ in the body.
2. Know clinical examinations and their relationship to the functions of organs.
3. Know the diseases that affect the various organs and tissues of the body.

9. Objectives: The student will be able to identify:
1. Explain the vital functions of the different body systems (circulatory, respiratory, digestive, nervous, etc.).
2. Understand the concept of homeostasis and how to maintain a stable internal environment.
3. Relate the relationship between anatomical structure and physiological function.

B - Course Skills Objectives: Students will be able to:
1. Clinical/Laboratory Skills: Ability to measure vital signs (blood pressure, pulse, ECG) and interpret the results.
2. Critical Thinking: Analyzing the functional changes that occur in the body during illness or physical exertion.

C. Affective and Value-Based Objectives: The student will be able to:
1. Prepare a comprehensive lecture on human physiology and its vital functions.
2. Deliver lectures on human physiology to students in lecture halls, conferences, and awareness

campaigns. 3. Prepare health reports, scientific posters, and conduct seminars on human physiology.
D - General and transferable skills (other skills related to employability and personal development): 1. Ability to work collaboratively in the laboratory. 2. Adherence to ethical standards in handling samples or volunteers during experiments.
*** Teaching and Learning Methods:**
*** Assessment Methods: Students are assessed through:** 1. Daily exams (oral and written). 2. Preparing academic reports and participating in student discussions. 3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	3+2	Knowing the structure and function of each organ in the body	Safety precautions from the hazards of the laboratory materials, chemicals and electricity.	PowerPoint + Whiteboard + Video	Oral Exam
2	3+2	=	Cells (Define – types – structure of the cell) , Tissues (Define types ,structure of the tissue), Muscles(Define , types , structure of the muscles).	PowerPoint + Whiteboard + Video	Written Exam
3	3+2	=	Blood –Functions – properties composition – blood plasma –blood serum	PowerPoint + Whiteboard + Video	Seminar Preparation
4	3+2	=	Erythrocyte(proprieties – shapes-number –functions) production and degradation of blood cells	PowerPoint + Whiteboard + Video	Oral Exam
5	3+2	=	Leukocyte (Types –Shapes –number-functions)	PowerPoint + Whiteboard + Video	Written Exam
6	3+2	=	Hemoglobin-functions – normal value- composition ,Platelets(number-functions) Coagulation of blood	PowerPoint + Whiteboard + Video	Seminar Preparation

7	3+2	=	Cardiovascular system – heart- structure of heart – function – cardio valve- cardiac cycle – heart sounds	PowerPoint + Whiteboard + Video	Oral Exam
8	3+2	=	Blood vessels (arteries – veins-capillary blood vessels) properties –blood cycle (pulmonary &systemic)	PowerPoint + Whiteboard + Video	Written Exam
9	3+2	=	Blood pressure –normal value- factors effecting of blood pressure	PowerPoint + Whiteboard + Video	Seminar Preparation
10	3+2	=	Respiratory system – structure –expiration – inspiration – respiratory muscles – respiratory rate	PowerPoint + Whiteboard + Video	Oral Exam
11	3+2	=	Pulmonary volume – pulmonary ventilation – regulation of gas exchange in blood by respiration	PowerPoint + Whiteboard + Video	Written Exam
12	3+2	=	Urinary system – structure – functions	PowerPoint + Whiteboard + Video	Seminar Preparation
13	3+2	=	Functions of kidneys- composition of urine – cast and stone in urine normal	PowerPoint + Whiteboard + Video	Oral Exam
14	3+2	=	Ear and eye (structure & functions)	PowerPoint + Whiteboard + Video	Written Exam
15	3+2	=	Skin (Define , structures and function)	PowerPoint + Whiteboard + Video	Seminar Preparation

11. Infrastructure:

1. Required Textbooks	There is no textbook
2. Main References (Sources)	1. Scientific and methodological books in the field of specialization. 2. Practical and specialized books.
a. Recommended Books and References (Scientific Journals, Reports, etc.)	1.Hall, J. E. 1. (2016). Guyton and Hall textbook of medical physiology (13th edition.). Philadelphia, PA: Elsevier.
b. Electronic Resources, Websites	Official website of the Polytechnic College / Karbala (https://ikr.atu.edu.iq)

12. Curriculum Development Plan:

The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:

1- There are no lectures that can be added because the curriculum is updated according to the latest developments.

* Medical microbiology:

Academic course description for the academic year 2025-2026 AD for the subject (Medical microbiology 1) Department of Community Health Technologies Stage (First) Semester (First).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	**Medical Microbiology 1**
4.Course Instructor:	**Pro. Assistant Dr. Ahmed Khudhair Abdulridha Lecturer Assistant Noor Imad**
5.Available Attendance Forms	**Direct**
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	**(2) Theory + (3) Practical**
8.Date of Preparation of this Description	**1/12/2025**

9.Course Objectives: By the end of the course, the student will be able to:
know a simple general idea about :
Pathogenes (Bacteria, fungi, parasites and viruses), the immunity and disease prevention

9. Objectives: The student will be able to identify:

1. Do diagnosis for some simple cases in his field work, instead of specialest, when specielest is absent.
2. Do some tests in the accidental cases.

Collect, preserve and transport the pathgenic samples.

B - Course Skills Objectives: Students will be able to:
B1Conducting examinations for certain cases
B2 - Diagnosing simple cases in the absence of a specialist
B3 - Methods of collecting, storing, and transferring data
B4 - Knowledge of school, rural, and occupational health

C. Affective and Value-Based Objectives: The student will be able to:
1. Prepare a comprehensive lecture in the field of medical microbiology.
2. Giving a lecture within the specialization to students in the lecture hall.
3. Prepare health reports and scientific posters, and deliver seminars.

D - General and transferable skills (other skills related to employability and personal development): D1- Graduate of a Medical Institute D2- High ability to collaborate and correct errors D3- Skill in performing the required work D4- Ability to develop any skill required by the current job
*** Teaching and Learning Methods:** 1. Utilize modern teaching methods, including PowerPoint presentations and the classroom whiteboard. 2. Enhance lectures using YouTube and other online programs, and display educational videos. 3. Develop practical skills through field visits and summer training.
*** Assessment Methods: Students are assessed through:** 1. Daily exams (oral and written). 2. Preparing academic reports and participating in student discussions. 3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	5	-Raising the level of motivation for learning in its various forms: intrinsic motivation, social motivation and achievement motivation. - Creating opportunities to implement a collaborative curriculum planning approach, and for collaboration among faculty members to identify gaps and redundancies. - To help students ensure that decisions regarding the curriculum and learning environment are sound. - To promote a philosophy of continuous monitoring and improvement. - Helping students ensure accountability and the quality of academic	History of microbiology, site of microorganism in the world of the living & the branches of microbiology. Biological hazards and how to deal with them, signs and warning signs in laboratories, Disposal of waste from workshops and medical laboratories, Disposal of medical laboratory waste.	Lecture Laboratories Field Visits Systematic Training Summer Training PowerPoint + Whiteboard + Video	Daily quizzes Term quizzes Final quizzes Practical projects Oral Exam Written Exam Seminar Preparation

		programs			
2	5	=	Bacterial morphology,bacterial cell structure.	=	=
3	5	=	Bacterial requirement, growth curve	=	=
4	5	=	Controle of microorganisms.	=	=
5	5	=	Pathogenes of respiratory system .	=	=
6	5	=	Pathogenes of digestive system.	=	=
7	5	=	Pathogenes of urinary and sexual systems	=	=
8	5	=	Food poisoning.	=	=
9	5	=	Contamination of hospitals .	=	=
10	5	=	General characters of fungi .	=	=
11	5	=	Fungal diseases.	=	=
12	5	=	The viruses , shapes , sizes & some viral diseases.	=	=
13	5	=	Introduction of parasites.	=	=
14	5	=	Protozoa , Entamoeba histolytica.	=	=
15	5	=	Flagellates, Giardia . Trichomonase .	=	=

11. Infrastructure:	
1. Required Textbooks	Medical Microbiology - Author: Dr. Mahdi Al-Sammak
2. Main References (Sources)	**Medical microbiology --jawis**
a. Recommended Books and References (Scientific Journals, Reports, etc.)	
b. Electronic Resources, Websites	WWW.MEDSCAPE.COM
12. Curriculum Development Plan: The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:	

*Biostatistics:

Academic course description for the academic year 2025-2026 AD for the subject (Biostatistics) Department of Community Health Technologies Stage (First) Semester (First and Second).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	Bio.St
5.Course Instructor:	**Manal mousa abd alema**
5.Available Attendance Forms	
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	Total number of hours: 2 hours (2 theoretical only) / total number of units: 2 units
8.Date of Preparation of this Description	15/12/2025

General Objectives: -

- At the end of the academic year, the student will be able to process and analyze statistical data and reach correct conclusions.

In particular: - The student will be able to:

- Dealing with statistical data.
- Dealing with and Motility and Morbidity statistics.
- Organizing the statistical form and health form related to daily incidents such as births, deaths and diseases.

9. Objectives: The student will be able to identify:

B - Course Skills Objectives: Students will be able to:

- Cooperative education strategy.
- Brainstorming education strategy.
- Education strategy by exchanging opinions and discussion.
- Educational strategy by presenting information.

D - General and transferable skills (other skills related to employability and personal development):

* Teaching and Learning Methods:
* Assessment Methods: Students are assessed through: 1. Daily exams (oral and written). 2. Preparing academic reports and participating in student discussions. 3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1+2	2	- Raising the level of motivation for learning in its various types: internal motivation. - Creating opportunities to implement the collective planning approach to the curriculum.	Introduction to statistics and its types. - Samples. - Variables. - Classified and unclassified data	• Lecture. • Systematic training. • Summer training.	• Daily exams. • Quarterly exams Final exams.
3+4	2	=	Representing frequency distributions for "classified data" - Graphical presentation methods. Measures of dispersion...	=	=
5-7	2	=	- Measures of central tendency	=	=
8	2	=	Parametric and non-parametric tests	=	=
9+10	2	=	Preparing a questionnaire form for medical research.	=	=
11	2	=	Definition of Biostatistics and its sources.	=	=
12-14	2	=	Life statistics: - The concept of ratio and rate - Mortality. - Morbidity.	=	=
15	2	=	Statistics on causes of death:	=	=

			(Medical certificate, cause, death, death certificate).		
Course structure (Theoretical - Second semester)					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1+2	**2**	- Raising the level of motivation for learning in its various types: internal motivation. - Creating opportunities to implement the collective planning approach to the curriculum.	Research: (The purpose of the research and what are the ambitions for conducting it)	• Lecture. • Systematic & Summer training.	• Daily exams. • Quarterly exams Final exams.
3	**2**	=	Ethics of scientific research	=	=
4	**2**	=	Structure of scientific research	=	=
5	**2**	=	Types of statistical studies	=	=
6+7	**2**	=	Basics of research - Data collection technology - Data collection plan -data analysis - Testing and ethical considerations	=	=
8-10	**2**	=	Preparing the questionnaire form	=	=
11	**2**	=	How to transcribe questionnaires and convert them into classified statistical data	=	=
12+13	**2**	=	How to start scientific research: (Choose the title, objectives, type of samples) Samples and methods of using them	=	=
14+15	**2**	=	Some applications used in scientific research.	=	=

11. Infrastructure:	
1. Required Textbooks	Life Statistics Manual, a methodological book / 1986
2. Main References (Sources)	• Scientific methodological books in the field of specialization • Specialized practical books.
a. Recommended Books and References (Scientific Journals, Reports, etc.)	World Health Organization Textbook of Community Medicine
b. Electronic Resources, Websites	https://ikr.atu.edu.iq(
12. Curriculum Development Plan: The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:	

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* Biochemistry:

Academic course description for the academic year 2025-2026 AD for the subject (Clinical chemistry I) Department of Community Health Technologies Stage (First) Semester (First).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	**T.C.H**
6.Course Instructor:	**1- Lec. Dr. Aziz Hussein Jasim Email: Aziz.Jasim@alzahraa.edu.iq** **2- 2- Asst. Lec. Amani Nadhim Kadhim Email: Amani.kadhim.ikr@atu.edu.iq**
5.Available Attendance Forms	**Compulsory / academic course**
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	**(2 theory + 3 practical) /5 units**
8.Date of Preparation of this Description	**1/9/2025**
9.Course Objectives: By the end of the course, the student will be able to: • Knowledge of the basics and components of life molecules • Knowledge of cellular metabolism and energy extraction • Knowing the ways they interact within the body of a living organism	

2. Objectives: The student will be able to identify:
   • Knowledge of the basics and components of life molecules
   • Knowledge of cellular metabolism and energy extraction
   • Knowing the ways they interact within the body of a living organism

B - Course Skills Objectives: Students will be able to:
 Giving detailed theoretical lectures Use the smart board Use presentation slides Requiring periodic reports

C. Affective and Value-Based Objectives: The student will be able to:
• Knowledge of the basics and components of life molecules
• Knowledge of cellular metabolism and energy extraction
• Knowing the ways they interact within the body of a living organism

D - General and transferable skills:
Giving detailed theoretical lectures
• Use the smart board
• Use presentation slides
• Requiring periodic reports

*** Teaching and Learning Methods:**

*** Assessment Methods: Students are assessed through:**
1. Daily exams (oral and written).
2. Preparing academic reports and participating in student discussions.
3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	**3**	**3**	**Safety in biochemistry**	**PowerPoint + Whiteboard + Video**	**Oral Exam + written + practical**
2		1	2	Introduction to the macromolecules biochemistry	Definitions andterms; proteins, enzymes; Clinical value.
3		2	3	Amino acids	Structures of A.A (table of standard A.A abbreviationand side chain); Classification, properties, isomerism.
4		3	3	Amino acids	Chemical reactions, Zwitter ions, titration curve calculating isoelectric point values. Examples and questions. Non standards A.A: Structures,

					existence and clinical value.
5		3	3	Peptides	Peptide bond, resonance forms, isomers, physical propertiesand chemical reactions. Essential poly peptides in human body, structures, roles and clinical values.
6		3	3	Proteins	Structure and conformations of proteins, Primary structure, Secondary structure (4 helix, 5 sheet), tertiary structure, quaternary structure. Classification, synthesis, cellular functions (Enzymes, cellsignaling, and ligand transport, structural proteins), protein in nutrition.
7		2	3	Denaturation of proteins and protein sequencing	Determining A.A composition, N- terminal A.A analysis, C-terminal A.A analysis, Edman degradation, prediction protein sequence from DNA/ RNA sequences. Methods of protein study: Protein purification, cellular localization, proteomics and bioinformatics, structure predication and simulation.
8		3	3	Carbohydrates	Chemistry and classification, biomedical importance, classification of CHO, Stereochemistry of monosaccharides, metabolism of CHO; Physiologically important monosaccharides, glycosides, disaccharides, polysaccharides.

9		2	3	Lipids	Introduction, classification of lipids, fatty acids (F.A), nomenclature of F.A, saturated F.A, unsaturated F.A, physical and physiological properties of F.A, metabolism of lipids. Phospholipids,lipid peroxidation and antioxidants, separation and identification of lipids, amphipathic lipids.
10		3	3	Enzymes	Structures and mechanism, nomenclature, classification, mechanisms of catalysis, thermodynamics, specificity, lock and key model, induced fit model, transition state stabilization, dynamics and function, allosteric modulation. Biological function, cofactors, coenzymes, involvement in disease.
11		2	2	Kinetics	General principles, factors effecting enzyme rates (substrateconc., pH, temperature, etc), single-substrate reaction (Michaelis-Menten kinetics), kinetic constants. Examples of kinetic questions and solutions.
12		1	1	Enzyme inhibition	Reversible inhibitors, competitive and non competitive inhibition, mixed-type inhibition, Irreversible inhibition. Inhibition kinetics and binding affinities (*ki*), questions and solutions.
13		2	1	Control of activity and uses	multi-substrate reactions, ternary-complex mechanisms,

				of inactivators	ping-pong mechanisms, non-Michaelis- Menten kinetics, pre-steady-state kinetics, chemical mechanisms.
14		3	3	Nucleic Acid	Chemical structure, nucleic acid components, nucleicacid bases, nucleotides and deoxynucleotides (Properties, base pairing, sense and antisense, super-coiling, alternative structures, quadruple structures.
15		2	2	Biological functions of DNA	Genes and genomes, transcription andtranslation, replication.
		15	3	Biochemistry of extracellular and intracellular communication	Plasma membrane structure and function; Biomedical importance, membraneproteins associated with lipid bilayer, membranes protein composition, dynamic structures of membranes, a symmetric structures of membranes.

11. Infrastructure:	
1. Required Textbooks	Harper's Illustrated Biochemistry, last Edition
2. Main References (Sources)	Lippincott's principles of biochemistry last edition Lehninger principles of biochemistry last edition
a. Recommended Books and References (Scientific Journals, Reports, etc.)	The institute library contains relevant resources
b. Electronic Resources, Websites	The electronic library of the Ministry of Higher Education Pub med.gov & NCBI
12. Curriculum Development Plan: The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added: lecture safety in biochemistry to the practical part.	

*Human rights and democracy:

Academic course description for the academic year 2025-2026 AD for the subject (Human rights and democracy) Department of Community Health Technologies Stage (First or Second) Semester (First or Second).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	nhxdhxo7
7.Course Instructor:	Assistant Teacher Hussein Ali Mohammed Hussein
5.Available Attendance Forms	Classroom
6.Semester/Year	Level 1 / First Semester / 2025-2026
7.Total Credit Hours	Two hours per week
8.Date of Preparation of this Description	September 1, 2025

9.Course Objectives: By the end of the course, the student will be able to:

A- 1. Introducing the subject of human rights and its topics, which include: 1- Principles of human rights 2- Human rights in divine laws 3- Human rights in ancient times 4- Types of rights and public freedoms 5- Human rights in declarations of rights and regional documents 6- Human rights in Iraqi constitutions 7- Means of protecting human rights.

1. **Objectives: The student will be able to identify:10. Course Outcomes, Teaching and Learning Methods, and Assessment:* Course Outcomes:**

A- Cognitive Objectives: The student will be able to:

1. Introduce the student to the principles of rights, their types, and the differences between them.
2. Introduce the student to human rights in divine laws and how Islam's approach to rights differs from other legal systems.
3. Introduce the student to human rights in ancient times and the differences between the civilizations of Mesopotamia, the Nile Valley, and Western civilizations.
4. Introduce the student to the types of rights and freedoms, including traditional rights, the position of international agreements, and intellectual rights and freedoms.

5. Introduce the student to the Declaration of the Rights of Man and of the Citizen in European, regional, and American countries, as well as the Arab Charter on Human Rights.
6. Introduce the student to human rights in Iraqi constitutions, including personal rights and freedoms, and the different types of Iraqi constitutions.
7. Introduce the student to the means of protecting human rights, including ordinary legislation and political mechanisms. B. Course-Specific Skills Objectives: The student will be able to:
1. Teach the student how to understand the principles of human rights and their origins.
2. Teach the student to differentiate between human rights in ancient and modern times and how human rights are constantly evolving.
C. Affective and Value-Based Objectives: The student will be able to:
1. Prepare a comprehensive lecture in the field of...
2. Teach students about human rights texts in their daily lives and in all aspects of life.
3. Prepare students for the best jobs in the legal department and meet the demands of the job market.
4. Enhance students' confidence in expressing legal opinions objectively on human rights.
5. Deliver a lecture within their specialization to students in the lecture hall.
6. Prepare health reports and scientific posters and deliver seminars.

B - Course Skills Objectives: Students will be able to:

C. Affective and Value-Based Objectives: The student will be able to:

D - General and transferable skills (other skills related to employability and personal development):

*** Teaching and Learning Methods:**

*** Assessment Methods: Students are assessed through:**
1. Daily exams (oral and written).
2. Preparing academic reports and participating in student discussions.
3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	Two hours	Understanding the types of rights and their areas of application	The Concept of Human Rights	Whiteboard lectures	Oral Exam
2	Two hours		The Evolution of Human Rights	Smartscreen lectures	Oral Exam
3	Two hours	Tracing the historical roots of the concept of human rights	Human Rights in Ancient Times: Mesopotamia and the Nile Valley	PowerPoint lectures	Seminar Preparation
4	Two hours		The Idea of Human Rights in Western Civilization: Greco-Roman	Video lectures	Oral Exam
5	Two hours	Tracing the historical roots of the concept of human rights	Human Rights in the Renaissance and the Dawn of the Modern Era	Whiteboard lectures	Oral Exam
6	Two hours	Tracing the historical roots of the concept of human rights	Human Rights in Islam	Whiteboard lectures	Oral Exam

7	Two hours	Tracing the historical roots of the concept of human rights	Types of Rights and Public Freedoms: Economic Freedoms and Social Rights	Smartscreen lectures	Oral Exam
8	Two hours	Tracing the historical roots of the concept of human rights	Intellectual Rights and Freedoms: The Universal Declaration of Human Rights in Regional Declarations and Documents	Video lectures	Oral Exam
9	Two hours		The Right to Assembly and Freedom of the Press and Education	PowerPoint lectures	Oral Exam
10	Two hours	Introducing the Universal Declaration of Human Rights and its importance as the culmination of humanity's achievements after the two world wars	The Right to Form Associations and Political Parties	Whiteboard lectures	Oral Exam
11	Two hours	Introducing the Universal Declaration of Human Rights and its importance as the culmination of humanity's achievements after the two world wars	Political Rights	Whiteboard lectures	Written Exam
12	Two hours		Human Rights in Regional Agreements	PowerPoint lectures	Oral Exam
13	Two hours	Demonstrating the concept of freedoms for students	Democracy: Types and Patterns of Democracy	PowerPoint lectures	Oral Exam
14	Two hours	Demonstrating the concept of freedoms for students	Political Parties	PowerPoint lectures	Oral Exam
15	Two hours	Demonstrating the concept	Human Rights Violations: The Ba'ath Party and the ISIS Terrorist Organization	Video lectures	Oral Exam

11. Infrastructure:	
1. Required Textbooks	Human Rights and Democracy, Professor Ali Aboudi Naama
2. Main References (Sources)	
a. Recommended Books and References (Scientific Journals, Reports, etc.)	Dr. Hamed Khaled Hannoun, Human Rights, Al-Sanhouri Library, Beirut, 2015
b. Electronic Resources, Websites	
12. Curriculum Development Plan: The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:	

* Computer applications1

Academic course description for the academic year 2025-2026 AD for the subject (Computer) Department of Community Health Technologies Stage (First) Semester (First).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	
4.Course Instructor:	**Assist. Lect. Layth Haider Hamid**
5.Available Attendance Forms	
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	**1 Theory + 2 Practical**
8.Date of Preparation of this Description	

9.Course Objectives: By the end of the course, the student will be able to:

4. Use the computer for basic tasks.
5. Identify and discuss the various hardware components of a computer system.
6. Create documents using a word processor and create presentations.
7. Conduct research on the Internet.
8. Recognize an introduction to Artificial Intelligence (AI).

3. Objectives: The student will be able to identify:

A. Cognitive Objectives:

The student will be able to:

- Understand the concept of a computer and its importance in completing basic tasks.
- Distinguish between the different hardware components of a computer system and the function of each.
- Explain the basics of using word processing and presentation software.
- Clarify scientific research methods and information gathering via the Internet.
- Understand the concept of Artificial Intelligence and its primary application areas.

B - Course Skills Objectives: Students will be able to:

The student will be able to:

- Efficiently use the computer to perform basic tasks such as running programs and managing files.
- Deal practically with computer hardware components in a correct and safe manner.
- Create formatted text documents and presentations using dedicated software.
- Apply electronic research skills to access accurate and reliable information via the Internet.
- Employ simple AI applications to support learning and complete academic tasks.

C. Affective and Value-Based Objectives: The student will be able to:

ffective and Value-Based Objectives:

The student will be able to:

- Appreciate the importance of computers and AI in improving community health services and supporting health decisions.
- Show a positive attitude towards using modern digital technologies in health awareness and community prevention.
- Adhere to ethical and professional values when dealing with health data and using AI applications.
- Enhance the spirit of cooperation and teamwork when employing computers and smart technologies in health projects and activities.
- Develop a sense of responsibility regarding the safe and humane use of computers and
- AI to serve individual and community health.

D - General and transferable skills (other skills related to employability and personal development):
● Develop the student's ability to use computers and smart technologies to support health activities and community communication.
● Enhance analytical thinking and decision-making skills by employing AI applications in the health field.
● Develop teamwork and effective communication skills when implementing technology-based health projects and programs.
● Qualify the student for continuous learning and keeping pace with technical developments in computers and AI related to community health.

*** Teaching and Learning Methods:**

*** Assessment Methods: Students are assessed through:**
Teaching and Learning Methods:

- Theoretical Lectures: To explain the basic concepts of computers and AI and their applications in community health.
- Practical Lectures: To train students on using computers, software, and smart applications relevant to the health field.
- Problem-Based Learning: Discussing real-life cases in community health supported by technology.
- Cooperative Learning: Through teamwork and joint projects employing computers and AI in health awareness.
- Self-Directed Learning: Using electronic resources and digital platforms to enhance understanding and keep up with technical developments.

2. Preparing academic reports and participating in student discussions.

- Assessment Methods: Students are assessed through:

Written Tests: To measure the student's comprehension of theoretical concepts related to computers and AI.
Practical Assessment: To measure the student's ability to use computers and smart applications in the health field.
Reports and Assignments: Evaluating individual and group reports/assignments related to technology applications in community health.
Class Participation: Evaluating interactive activities and the student's commitment and performance during practical lectures and discussions.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	1	introduction to Computer	concepts of hardware, software, and their components; Concept of computing, data, and information;	Theory & Practical Lecture,	Theoretical/ Practical Exam,

			ICT applications; Linking I/O devices and peripherals to the CPU.	Discussion	Reports, Attendance
2	1	Computer Component	Computer parts, hardware parts, 0/1 units, types of memory.	=	=
3		Computer Components (Cont.)	basic CPU components, computer ports, PC features and types	=	=
4		OS & GUI	Operating System basics, commonn OSs, User Interface, using the Mouse.	=	=
5		OS & GUI (Cont.)	Using common icons, status bar, using menus, selecting menus, concept of folders and directories, opening/closing windows, creating	=	=
6		Word Processing Basics	Basic features of word processors, opening/closing docs, creating and editing text, formatting text and paragraphs, using templates	=	=
7		Word Processing (Con)	Creating and managing tables, using styles and themes, spelling and grammar tools, using headers and footers.	=	=
8		Spreadsheets	Introduction to spreadsheet software, creating and formatting worksheets, sorting and filtering data, using formulas and functions.	=	=
9		Spreadsheets (Cont.)	Formulas and functions, using pivot tables to analyze data, data validation, error checking, data analysis: creating charts and graphs	=	=
10		Presentation on Software	Introduction to presentation software, overview of common tools, creating a new presentation, using templates and elements, inserting formatting text/images, transitions and animations.	=	=
11		Presentation Software (Cont)	Using speaker notes and timers, Theory & Practical Lecture, Discussion Theoretical/Practical Exam, Reports, advanced features: hyperlinks and action buttons, troubleshooting Common presentation errors, future trends in presentation.	=	=
12		Intro to Internet & Web Browsers	Basics of computer networks (LAN/WAN)Concept of Internet and its applications, connection and intern	=	=
13		Intro to Internet & Web Browsers	WWW, web browsers, search engines; Understanding URLs, Domain Names, IP addresse	=	=

		(Cont.)			
14		Communication & Email	Email basics, getting an email account, sending/receiving emails, accessing sent emails, using email to collaborate on documents.	=	=
15		Cloud Computing	Definition and concept of Cloud Computing, Office suites (Office 365, Google Workspace), Google Docs, Sheets, Drive, and Meet	=	=

11. Infrastructure:	
1. Required Textbooks	None specified
2. Main References (Sources)	Graham Brown, David Watson, "Cambridge IGCSE Information and Communication Technology," 3rd Edition (2020 .(●Alan Evans, Kendall Martin, Mary Anne Poatsy, "Technology In Action Complete," 16th Edition (2020 .(●Ahmed Banafa, "Introduction to Artificial Intelligence (AI)," 1st Edition (2024 .(● Al-Khader Ali Al-Khader, "Computer Fundamentals 2016
a. Recommended Books and References (Scientific Journals, Reports, etc.)	• Scientific Journals, Reports. • https://www.noor-book.com
b. Electronic Resources, Websites	● Official website of the Polytechnic College / Karbala (https://ikr.atu.edu.iq)

13. Curriculum Development Plan:

The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:

● Principles of algorithm design and analysis and data structures.
● Basics of operating systems and computer resource management.
● Computer network concepts, data transmission, and communication protocols.
● Software engineering principles and software development life cycle.
● Databases: design and SQL query language.
● Introduction to information security and system/data protection.
● Focus on developing programming and problem-solving skills using multiple programming languages.
● Empowering students to understand computer system architecture and design effective software solutions.

COURSE DESCRIPTION FORMS FOR THE SECOND YEAR

* Community health

1. Course Name:
Community Health
2. Course Code:
T.C.H
3. Semester / Year:
Second grade/First semester
4. Description Preparation Date:
12/9/2025
5. Available Attendance Forms:
6. Number of Credit Hours (Total) / Number of Units (Total)
Total number of hours: 5 hours (2 theoretical + 3 practical) / total number of units: 5 units
7. Course administrator's name (mention all, if more than one name)
Name: **Maytham Salim AL-Nasrawii** Email: **maytham.alnasrawii@atu.edu.iq**
8. Course Objectives

Course Objectives	**General Goals:** The student will be able to become familiar with community health concepts and related techniques. **Special: The student will be able to:** 1. To become familiar with the components of public health and health education. 2. To know how to organize forms for pregnant women and children at the family registrar. 3. To know the importance of nutrition 4. To become familiar with health information and standards of health and disease.
9. Teaching and Learning Strategies	
Strategy	- Cooperative education strategy. - Brainstorming education strategy. - Educational strategy, collaborative concept planning. - Strategy education real-time feedback - Education strategy by exchanging opinions and discussion. - Educational strategy by presenting information. - Education strategy through training and presenting scientific developments.

10. The theoretical structure of the course

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	2	- Cooperative education strategy.	1- Definition of health and	1. The lecture. 2.Laboratories.	• Daily

		- Educational strategy, collaborative concept planning. - Strategy education real-time feedback - Education strategy by exchanging opinions and discussion. - Education strategy through training and presenting scientific developments.	Diseases : - Diseases cause. - The epidemiological triad.	3. Field visits. 4. Systematic training. 5. Summer training	exams. • Quarterly exams • Final exams. • Practical projects.
Second-Fourth	2	=	Community health & PHC.		
Fifth	2	=	Health education.		
Sixth	2	=	Nutrition. (Basic food components and their importance.)		
Seventh & Eighth	2	=	Environmental health:- •Environmental health goals. •air pollution. •Water pollution.		
Ninth & Tenth	2	=	• Medical waste (classification, methods of handling, and how to dispose of it) • Waste and its types (disposal of liquid and solid waste)		
Eleventh	2	=	Disabilities: A - Physical disabilities. B - The mentally disabled.		
Twelfth	2	=	Rehabilitation - Types of rehabilitation.		
Thirteenth	2	=	Controlling infectious diseases		

			(transmissible diseases).		
Fourteenth	2	=	Non-communicable diseases.		
Fifteenth	2	=	Vital statistics:- The general method of health research. - Information about births and deaths.		
The practical structure of the course					
First to third	3	- Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. - Creating opportunities to implement a collective planning approach to the curriculum, and for cooperation among faculty members to identify gaps and repetitions. - Helping the student to ensure accountability and ensure the quality of academic programs.	PHC	1. The lecture. 2.Laboratories. 3. Field visits. 4. Systematic training. 5. Summer training	• Daily exams. • Quarterly exams • Final exams. • Practical projects.
Fourth & Fifth	**3**	**=**	Injections and vaccines.- National vaccination schedule in Iraq.		
Sixth	**3**	**=**	A visit to primary health care centers.		
Seventh	**3**	**=**	Discussing student reports.		
Eighth	**3**	**=**	School health and how to conduct initial examinations.		
Ninth	**3**	**=**	A visit to the Environmental Protection Center.		
Tenth	**3**	**=**	A visit to the Nutrition Research Center.		
Eleventh	**3**	**=**	Practical training at the Center for Endemic Diseases.		

Twelfth	**3**	**=**	A visit to the Institute for the Disabled (physically and mentally).		
Thirteenth	**3**	**=**	A visit to the Isolation hospital		
Fourteenth	**3**	**=**	Preventive measures regarding non-communicable diseases.		
Fifteenth	**3**	**=**	Discussing student reports.		

10. 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

11. Learning and Teaching Resources

Required textbooks (curricular books, if any	There is no systematic book.
Main references (sources)	• Scientific methodological books in the field of specialization • Specialized practical books.
Recommended books and references (scientific journals, reports...)	• World Health Organization Textbook of Community Medicine. • Community Health Book (2011) by Dr. Talal Yassin Muhammad.
Electronic References, Websites	Official website of the Polytechnic College / Karbala https://ikr.atu.edu.iq

Prepared by:
Prof. Maytham Salim AL-Nasrawii
Specialist in community health technologies

*Health inspection:

Academic course description for the academic year 2025-2026 AD for the subject (Health Inspection) Department of Community Health Technologies Stage (Second) Semester (First).

- This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala
2.Department/Center	Community Health Technologies
3.Course Name/Code	Health Inspection/C.H.I
8.Course Instructor:	Ahmed Ali Khesbak
5.Available Attendance Forms	Attendance
6.Semester/Year	Level 1 / First Semester / 2025-2026
7.Total Credit Hours	Theory 2 Hours + Practical 4 Hours
8.Date of Preparation of this Description	11/11/2025

9.Course Objectives: By the end of the course, the student will be able to:

9. To become familiar with the principles, rules, and requirements for a successful inspection process.
10. To identify the health conditions and specifications that must be legally met by establishments subject to health inspection.

B - Course Skills Objectives: Students will be able to:

1. Developing effective communication skills with community members of all ages and cultural backgrounds.
2. Acquiring the ability to implement health education and awareness programs tailored to community needs.
3. Developing skills in accurately collecting, organizing, and documenting field health data

C. Affective and Value-Based Objectives: The student will be able to:

1 . Prepare a comprehensive lecture in the field of [topic to be inserted].
2. Deliver a lecture within the specialization to students in the lecture hall.
3. Prepare health reports and scientific posters, and deliver seminars.

D - General and transferable skills (other skills related to employability and personal development):

- Effective oral and written communication skills with colleagues, community members, and healthcare institutions.
- Ability to work collaboratively and effectively within multidisciplinary teams.
- Developed time management, organizational, and task completion skills.

*** Teaching and Learning Methods:**

*** Assessment Methods: Students are assessed through:**
1. Daily exams (oral and written).
2. Preparing academic reports and participating in student discussions.
3. Midterm and final exams.

10. Course structure: First // Course structure (Theory - First Semester)

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	6 hours	• To enhance motivation for learning in its various forms: intrinsic motivation and extrinsic motivation. • To create opportunities for implementing a collaborative curriculum planning approach.	**concept of health control, the food system, excerpts from the Public Health**	PowerPoint + Whiteboard + Video	Oral Exam
2	6 hours	=	**Food safety, environmental safety**	=	=
3	6 hours	=	**Conditions for granting sick leave, conditions that must be met by the leave holder and the workers**	=	=
4	6 hours	=	**Public condition**	=	=
5	6 hours	=	**Special conditions apply, including hotels and rest houses, public cafes and casinos, family parks and takeaway coffee and tea shops.**	=	=
6	6 hours	=	**Ovens, bakeries, and pastry shops;**	=	=
7	6 hours	=	**A visit to the supervisory department to learn about its units and the duties of each unit.**	=	Written Exam
8	6 hours	=	**Hotels**	=	=
9	6 hours	=	**establishments for preparing, processing, and serving food and beverages**	=	=
10	6 hours	=	**Ice cream service shops, and shops selling home-based food supplies.**	=	Seminar Preparation
11	6 hours	=	**Wholesale meat, dairy, egg and animal products shops; shops selling red meat, poultry and their products**	=	=
12	6 hours	=	**Ready-made food and beverage outlets, wholesale and retail river and sea fish shops, kiosks selling sherbet, juice, and ready-made meals**	=	=

13	6 hours	=	**Fitness**	=	=
14	6 hours	=	**Food processing plant, food additives**	=	=
15	6 hours	=	**Food processing plant, food appetizers plant**	=	=

10. Course structure: First // Course structure (practical - First Semester)

Weeks	**Hours**	**Required Learning Outcomes**	**Unit/Topic Name**	**Teaching Method**	**Assessment Method**
1+2	4 hours	• To enhance motivation for learning in its various forms: intrinsic motivation and extrinsic motivation. • To create opportunities for implementing a collaborative curriculum planning approach..	**Ice industry**	PowerPoint + Whiteboard + Video	Oral Exam
3+4	4 hours	=	**A visit to the supervisory department to learn about its units and the duties of each unit.**	=	=
4	4 hours	=	**How to keep records and other administrative matters**	=	=
5+6	4 hours	=	**Work context**	=	=
7	4 hours	=	**Hotels**	=	=
8	4 hours	=	**Casino**	=	=
9	4 hours	=	**Ovens and bakery**	=	Written Exam
10	4 hours	=	**Ice-cream service shops and shops selling home-based food supplies.**	=	=
11+12	4 hours	=	**Ice cream service shops, and shops selling home-based food supplies.**	=	=
13	4 hours	=	**Wholesale meat, dairy, egg and animal products shops; shops selling red meat, poultry and their products**	=	Seminar Preparation
14	4 hours	=	**Ready-made food and beverage outlets, wholesale and retail river and sea fish shops, kiosks selling sherbet, juice, and ready-made meals**	=	=
15	4 hours	=	**Barbershops and beauty salons, coffee grinding and selling shops, live chicken shops**	=	=

11. Infrastructure:	
1. Required Textbooks	Health Inspection and Control for Institute Students / Dr. Faleh Metr
2. Main References (Sources)	health Guide / Ministry of Health / Dr. Hussein Mahdi AlBir Public Health Law No. 89 of 1982 and its amendments Law No. 54 of 2001 (Eighth Amendment of the Public Health Law)
a. Recommended Books and References (Scientific Journals, Reports, etc.)	Scientific journals, periodicals, and research in the field Websites (Google and YouTube).
b. Electronic Resources, Websites	https://ikr.atu.edu.iq

12. Curriculum Development Plan:

The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added: justifications for developing the course:

• To keep pace with modern developments in the field of public health and health inspection.

• To link theoretical content with practical application and the job market.

• To enhance students' skills in field health inspection.

• To comply with academic accreditation requirements and quality standards.

Course Development Objectives: • To update the curriculum content in line with modern health legislation.

• To enhance the practical and applied aspects of the course.

• To develop students' analytical and decision-making skills.

• To introduce risk-based inspection concepts.

✓ **Proposed lectures to be added and developed:**

1- Ethics of inspection and control.

2- Solid and medical waste management.

3- The role of inspection in reducing the spread of diseases.

4- Connecting students with the job market.

*Medicine & Surgery:

1. Course code
M.&.S
2. semester/ year
Second grade / second semester
3. Date this description was prepared
2025/14/2
4. Available attendance forms
My presence
5. Number of study hours (total) / Number of units (total)
Total number of hours: 6 hours (2 theoretical + 4 practical) Number of units:
6. Name of the course administrator (if more than one name is mentioned)
• Dr. Adnan Abdulazim Kadhim : dadnanaak@gmail.com • Asst. Lec. Hussein Mahawish: Hussein.mohammad.ikr31@atu.edu.iq

Name Of course	Teaching Language	Lesson Year	Weekly Hours			
			Theory	Practical	All	NO. Of Units
Medicine & Surgical Internal medicine and surgery	English	Second	2	4	6	6
	English Language					

Course Objectives:

- General Objective: To identify the most important internal diseases and manage simple clinical cases.
- Specific Objectives: The student will be able to:

1. Administer blood and medical injections.
2. Dress wounds.
3. Measure blood pressure, pulse rate, and body temperature.

Teaching and Learning Strategies

1. Cooperative learning strategy
2. Brainstorming strategy
3. Collaborative concept mapping strategy
4. Discussion and opinion exchange strategy
5. Training-based learning strategy
6. Information presentation strategy

Practical + theoretical

Theoretical Content	
Week	Description Content
1	Bronchitis (M) + cholycystitis (S)
2	Pleural effusion (M)) + gall bladder stone (S)
3	Anemia (M) + spleen injury (S)
4	Leukemia (M) + pancreatitis (S) Hemorrhagic fever
5	Lymphoma (M) + hernia (S)
6	Hemophilia (M) + types of hernia (S)
7	Glomerulonephritis (M) + tracheal obstruction (S)
8	Nephrotic syndrome and renal failure (M) + lung ca. (S)
9	Rheumatoid arthritis (M) + fracture (S)
10	Gout (M) + pyelonephritis (S)
11	Hyperpitutirism (M) + renal stones (S)
12	Thyroid gland disease (M) + bladder ca. (S)
13	Addison diseases (M) + blood transfusion (S)
14	Para Thyroid gland disease (M) + hemorrhoid (S)
Practical points (Outside the institution)	
1	Medical ward and out patient
2	Reception of patient and doing case sheet
3	Surgical ward and out patient

*Occupational health and safety:

Academic course description for the academic year 2025-2026 AD for the subject (**Occupational Health and safety**) Department of Community Health Technologies Stage (Second) Semester (First).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	**Occupational Health and safety1**
4.Course Instructor:	A.Prof. Mohammad Abdulbaqi Abdulmohsin **A. teacher. Noor Majid Hussain**
5.Available Attendance Forms	**Students of the Department of Community Health Technologies / second level (second academic year)**
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	**(2) Theory + (3) Practical**
8.Date of Preparation of this Description	**15/9/2025**

9.Course Objectives: By the end of the course, the student will be able to:

A-learn about the concept and importance of Occupational Health and safety and familiarity with the safety rules and principles that must be provided in various work sites.

B-identify the damages and risks to which workers are exposed in various facilities and work sites .

10. Objectives:

A-The student will be able to identify:

- The student should get acquainted with the concept of Occupational Health and safety.
- The student should get acquainted with the goals and programs of Occupational Health and safety.
- The student should get acquainted with the various occupational hazards affecting the health of the working individual.

B - Course Skills Objectives: Students will be able to:

- The student should be able to identify the risks according to their type.
- The student should be able to know, use and read the devices related to occupational hazards.
- The student should be able to submit a film or photos showing the types of occupational hazards.

C. Affective and Value-Based Objectives: The student will be able to:

- The student should participate in the scientific discussions related to the lecture.
- The student should present a lecture within the lesson material.
- The student should submit other activities such as reports, posters and others.

D - General and transferable skills (other skills related to employability and personal development):

- The student should focus on the vocabulary of the curriculum (course).
- The student should attend and participate in all lectures related to the course of study.
- The student should participate in field visits and scientific trips.

*** Teaching and Learning Methods:**

1. The use of modern methods through the display towers (((PowerPoint) in addition to the use of a blackboard row.
2. Promoting the lecture through the YouTube program, electronic programs and the presentation of educational videos.
3. Concentration of performance skills through field visits and summer training.

*** Assessment Methods: Students are assessed through:**

1. Daily exams (oral and written).
2. Preparing academic reports and participating in student discussions.
3. Midterm and final exams.

11. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
The first	5	Theoretical aspect: The concept of Occupational Health and safety and its goals. The practical side: A field visit to the National Center for Occupational Health and safety to identify its objectives And the duties of the technical departments in it .	Part One (principles of Occupational Health and safety)	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).
The second and third	10	Theoretical aspect: Occupational Health and safety in Iraq . Occupational Health and safety and its relationship to productivity . The practical side: Identify the uses of noise and vibration measuring devices	Part One (principles of Occupational Health and safety)	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).
Fourth and fifth	10	Theoretical aspect: 1-physical (natural)risks A-noise and vibrations . The practical side: Getting to know the uses of thermometers at the work site The editor of the black club Surface barometer	The second part (occupational hazards and diseases caused by them).	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).
VI, VII and VIII	15	Theoretical aspect: B-temperature, humidity and air velocity . C-Lighting D-	The second part (occupational hazards	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).

		radiation of all kinds - Atmospheric pressure The practical side: Familiarization with the use of relative humidity measuring devices at the work site A-humidifier B-thermoheicograph	and diseases caused by them).		
The ninth	5	Theoretical aspect: And-electricity The practical side: How to evaluate the results of measurements of temperature, humidity and air velocity And their relationship to the effective and effective temperature corrected using the equations Mathematical and graphic .	The second part (occupational hazards and diseases caused by them).	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).
The tenth	5	Theoretical aspect: 2. chemical hazards A) gases B vapors The practical side: Getting to know the use of a lighting measuring device at work sites	The second part (occupational hazards and diseases caused by them).	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).
XI, XII - XIII and XIII	15	Theoretical aspect: C-dust 3-biological risk and Infectious Diseases 4-psychological factors Mechanical hazards The practical side: Identification of the use of gas and vapour measuring devices in work sites 1. the drecker pump 2-measuring the amount of healthy oxygen at work sites 3. explosive gas measuring device	The second part (occupational hazards and diseases caused by them).	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).
The Fourteenth	5	Theoretical aspect: Introduction to toxicology (definition of poison-the way it enters the body - Its interactions inside the body and ways of subtracting it outside the body) The practical side: 4-Use of pump	Part three (industrial poisons)	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).

		devices			
The fifteenth	5	Theoretical aspect: Heavy metal poisoning (lead-mercury-chromium) The practical side: Study of dust measuring devices and biological factors	Part three (industrial poisons)	The display (power point) is in addition to the class blackboard.	Examinations (oral and written).

12. Infrastructure:	
1. Required Textbooks	
2. Main References (Sources)	- Encyclopedia of Occupational Health and safety (ILO) Geneva 1990 Part II. - Occupational health for students of higher health institutes . -ENcyclopedia & Occupational health & safety ILO Volume 2 Geneva .1990
a. Recommended Books and References (Scientific Journals, Reports, etc.)	- The mentor in occupational health and safety. - Manual of basic principles of Occupational Health and safety in the work environment-International Labor Organization. –Occupational Health and safety –Faculty of Agriculture-Damietta University. -Occupational Health and safety-Damascus University.
b. Electronic Resources, Websites	The official website of the Polytechnic College / Karbala (https://ikr.atu.edu.iq)
13. Curriculum Development Plan: The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:	

A.Prof. Mohammad Abdulbaqi Abdulmohsin
Teacher of Occupational Health and safety1

*Epidemiology:

Academic course description for the academic year 2025-2026 AD for the subject (**Epidemiology**) Department of Community Health Technologies Stage (First) Semester (Second).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	**Epi.**
1. Course Instructor:	Assis. Prof. Dr. Moahmmed Abdulridha Merzah mohammed.merzah@atu.edu.iq Assis.lect Asia Jawad Kreem: asia.kareem@atu.edu.iq
5.Available Attendance Forms	**Attendance**
6.Semester/Year	**Level 2/ First Semester / 2025-2026**
7.Total Credit Hours	**(2) Theory + (3) Practical**
8.Date of Preparation of this Description	**19-10-2025**

9.Course Objectives: By the end of the course, the student will be able to:

General Goals: - The student will be able to become familiar with the concepts of epidemiology and the techniques related to it.

Special: The student will be able to:

- To learn about how diseases occur and how infectious diseases are transmitted and controlled.
- To learn how to analyze the occurrence of epidemics.
- To know the pathogens.

-To learn about calculating the spread of diseases and calculating the different rates of diseases and deaths.

9. Objectives: The student will be able to identify:

a) To understand how diseases occur, how infectious diseases are transmitted, and how to control them.

b) To understand how to analyze the occurrence of epidemics.

c) To understand the causes of diseases.

d) To understand how to calculate disease prevalence and the various rates of illness and death.

B - Course Skills Objectives: Students will be able to: First: Course Outcomes (Graduate Job Description)

Upon completion of this course, the student will be qualified to work as a "Public Health Practitioner" or "Member of an Epidemiological Surveillance Team," possessing the ability to:

• Apply the fundamental principles of epidemiology to monitor diseases and outbreaks.

• Contribute to the design and evaluation of prevention and control programs for communicable and non-communicable diseases.

• Analyze basic health data and produce epidemiological reports that serve decision-makers.

Second: Cognitive Objectives (Theoretical Aspect)

In accordance with the course syllabus, the student is expected to be able to: 1. Basic Concepts: Understand the definition of epidemiology, its history and development, and comprehend the "epidemiological triangle" (host, causative agent, and environment). 2. Disease Frequency Measurements: Distinguish between epidemiological statistical terms such as "prevalence" and "incidence" and how to calculate them. 3. Disease Patterns: Understanding the differences between epidemics, endemic diseases, and pandemics. 4. Epidemiological Study Designs: Understanding the different types of studies (descriptive, analytical, and experimental) and when to use each type. 5. Chain of Infection: Understanding how diseases are transmitted from the source to the susceptible host and methods for breaking this chain. 6. Epidemiological Investigation: Understanding the steps involved in investigating sudden outbreaks.
C. Affective and Value-Based Objectives: The student will be able to: - Course-Specific Skills Objectives: Students will be able to: 1. Calculate and Evaluate Epidemiological Indicators: Accurately calculate morbidity and mortality rates and interpret these figures within the context of community health. 2. Design and Analyze Epidemiological Studies: Select appropriate study designs (such as case-control or cohort studies) and collect relevant data. 3. Conduct Field Outbreak Investigations: Construct epidemiological curves to identify the source of infection and disease incubation period during a specific outbreak. 4. Use Software: Use simplified statistical software (such as Excel or EpiInfo) to input health data and extract results. 5. Evaluate Diagnostic Tests: Calculate the sensitivity and specificity of laboratory tests to determine their effectiveness in disease detection. 6. Preparing health reports: The skill of drafting a professional epidemiological report that summarizes a particular health condition and provides practical recommendations for prevention and control.
D - General and transferable skills (other skills related to employability and personal development):
*** Teaching and Learning Methods:**
*** Assessment Methods: Students are assessed through:** 1. Daily exams (oral and written). 2. Preparing academic reports and participating in student discussions. 3. Midterm and final exams.

10. Course structure:

W.	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1			Raising the level of motivation for learning in its	-	2

			various types:		
2			Internal motivation and social motivation.	- Creating opportunities to implement a collective planning approach to the curriculum.	-
3					1- Introduction to epidemiology.
4					- Objectives - Basics - General strategies
5					1. The lecture.
6					2.Laboratories.
7					3. Field visits.
8					4. Systematic training.
9				• Daily exams.	5. Summer training
10					• Quarterly exams
11					• Final exams.
12					• Practical projects.
13	=	=	General definitions used in the study of epidemiology	=	2
14			Epidemiological triad, its importance and applications	=	2
15			=	=	- Factors of disease occurrence (personality, place, time)

11. Infrastructure:	
1. Required Textbooks	There is no systematic book.
2. Main References (Sources)	• Scientific methodological books in the field of specialization • Specialized practical books.
a. Recommended Books and References (Scientific Journals, Reports, etc.)	World Health Organization Textbook of Community Medicine
b. Electronic Resources, Websites	The official website of the leprosy https://ikr.atu.edu.iq
12. Curriculum Development Plan: The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:	

*Environmental Health:

Academic course description for the academic year 2025-2026 AD for the subject (**Environmental Health**) Department of Community Health Technologies Stage (Second) Semester (First).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	
1. Course Instructor:	**Abdel Salam Hassan Hamza, Sura Hussein Bakheet**
5.Available Attendance Forms	
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	**2 Theory + 2 Practical**
8.Date of Preparation of this Description	

9.Course Objectives: By the end of the course, the student will be able to:

9. Objectives: The student will be able to identify:

B - Course Skills Objectives: Students will be able to:

C. Affective and Value-Based Objectives: The student will be able to:

D - General and transferable skills (other skills related to employability and personal development):

*** Teaching and Learning Methods:**

*** Assessment Methods: Students are assessed through:**

1. Daily exams (oral and written).
2. Preparing academic reports and participating in student discussions.
3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	2	Raising the level of motivatio For learning of different kinds Internal motivation and motivation Social and achievement	First: Environmer Health (Environmental Health Concept/ Objectives &	PowerPoint + Whiteboard + Video	Oral Exam Seminar Preparation

		motivation. Create opportunities to apply t collective planning curve of th curriculum, And for cooperation between members of the Commission Teaching to identify gaps and duplicates . Help the stud to make sure that the decision concerning Curriculum and educational environment Rashida .	Strategies / types of environment). Second: Components of th environment and environmenta pollutants.		
2	2	=	=	=	=
3	2	air pollution	=	=	=
4	2	air pollution	=	=	=
5	2	Water pollution	=		=
6	2	Water pollution	=	=	Written Exam
7	2	soil pollution	=	=	
8	2	Waste disposaland waste	=	=	=
9	2	Waste disposaland waste	=	=	=
10	2	Medical Waste	=	=	=
11	2	Wastewater TreatmentHealth	=	=	=
12	2	Environment and Food: Transmitted diseases With food, food preservation	=	=	=
13	2	Pest control and rodents	=	=	=
14	2	Radioactive contamination	=	=	=
15	2	How to monitor and optimize environment	=	=	Written Exam

11. Infrastructure:

1. Required Textbooks	
2. Main References (Sources)	Methodological scientific books in the field of specialization. Specialized scientific books.
a. Recommended Books and References (Scientific Journals, Reports, etc.)	Principles of Community Health, a book of research in human and environmental health, authored by Dr. Abdullah Al-Saeed
b. Electronic Resources, Websites	**https://ikr.atu.edu.iq**

12. Curriculum Development Plan:
The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:

*Pharmacology:

Academic course description for the academic year 2025-2026 AD for the subject (**Pharmacology1**) Department of Community Health Technologies Stage (First) Semester (First). This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	**Pharmacology 1**
1. Course Instructor:	**Assistant .prof. Ali abd allatif golum Mohammed**
5.Available Attendance Forms	**Classroom**
6.Semester/Year	**Level 1 / First Semester / 2025-2026**
7.Total Credit Hours	**2 Theory + 2 Practical**
8.Date of Preparation of this Description	**2025\12\18**
9.Course Objectives: By the end of the course, the student will be able to:	
9. Objectives: The student will be able to identify:	
B - Course Skills Objectives: Students will be able to:	
C. Affective and Value-Based Objectives: The student will be able to:	
D - General and transferable skills (other skills related to employability and personal development):	
* Teaching and Learning Methods:	
* Assessment Methods: Students are assessed through: 1. Daily exams (oral and written). 2. Preparing academic reports and participating in student discussions. 3. Midterm and final exams.	

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1+2	4	General considerations :- Prescription , Medication during pregnancy Med . during breast –feeding , pediatric , Geriatric , Med in renal impairment , Med . in hepatic impairment , adverse drug reactions , drug interaction	General considerations :- Prescription , Medication during pregnancy Med . during breast –feeding , pediatric , Geriatric , Med in renal impairment , Med . in hepatic impairment , adverse drug reactions , drug interaction	PowerPoint + Whiteboard + Video	Exam
3+4	4	C. V . S :- Digitalis and cardiac glycosides , Diuretics , Badrenoreceptors,blocking , antiarrythmic drugs , vasodilators,Antihypertensives	C. V . S :- Digitalis and cardiac glycosides , Diuretics , Badrenoreceptors,blocking , antiarrythmic drugs ,	PowerPoint + Whiteboard + Video	Written Exam

		,sympathomimetic ,Sclerosing agents .	vasodilators,Antihypertensives ,sympathomimetic ,Sclerosing agents .		
5+6	4	G.I.T. Antacids, antispasmodics , drugs Heeling peptic and D. ulcer , Antidiarrhoeal, Laxatives, Rectal and colonic drugs, drug act En intestinal secretions	G.I.T. Antacids, antispasmodics , drugs Heeling peptic and D. ulcer , Antidiarrhoeal, Laxatives, Rectal and colonic drugs, drug act En intestinal secretions	PowerPoint + Whiteboard + Video	Written Exam
7+8	4	R.S. Bronchodilators , corticosteraides , Allergic disorders, respiratory stimulants, Mucolytics , antitussives and expectorant Nasal decongestants.	R.S. Bronchodilators , corticosteraides , Allergic disorders, respiratory stimulants, Mucolytics , antitussives and expectorant Nasal decongestants.	PowerPoint + Whiteboard + Video	Written Exam
9+10	4	C.N.S. Hypnotics and axiolytics , Antipsychotics, Antidepressants , CNS stimulants , Anorectics , antiemetics , analgesics (mild, moderate, sever pain , migraine , antiepileptics , parkinsonism, drugs used in chorea , tics. Trigeminal neuralgia	C.N.S. Hypnotics and axiolytics , Antipsychotics, Antidepressants , CNS stimulants , Anorectics , antiemetics , analgesics (mild, moderate, sever pain , migraine , antiepileptics , parkinsonism, drugs used in chorea , tics. Trigeminal neuralgia	=	=
11+12	4	Infections:- Antibacterial, antiviral, antifungal Antiprotozoal , antihelmenthic drugs.	Infections:- Antibacterial, antiviral, antifungal Antiprotozoal , antihelmenthic drugs.	PowerPoint + Whiteboard + Video	Written Exam
13+14	4	Endocrine:- Drug used in diabetes , hypoglycemia , Pituitary harmones , thyroide and anti thyroide drugs , corticosteroides , female sex hormones , male sex hormobn And anti androgens , anabolic steroide Hyperglycemia drugs, otherandocrine hyper lipidemia drugs.	Endocrine:- Drug used in diabetes , hypoglycemia , Pituitary harmones , thyroide and anti thyroide drugs , corticosteroides , female sex hormones , male sex hormobn And anti androgens	PowerPoint + Whiteboard + Video	Written Exam
15	4	G.U.T. Uterine stimulants , uterine relaxants , Vulval and viginal disorders, Contraceptives, U.T. disorders	G.U.T. Uterine stimulants , uterine relaxants , Vulval and viginal disorders, Contraceptives, U.T. disorders	PowerPoint + Whiteboard + Video	Written Exam

11. Infrastructure:	
1. Required Textbooks	Laurence, D.R. ; Bennett , P.N. and Brown, M.J.(1997).Clinical pharmacology. New York ; London : Churchill Livingstone. Mycek, M .J. ; Harvey R.A. and Champe , P.C.(1997).Lippencott's Ilustrated Reviews: Pharmacology.(2nd ed.). Lippincott-Raven, Philadelphia New York
2. Main References (Sources)	Karen Whalen, PharmD, BCPS, FAPhA Lippincott® Illustrated Reviews: Pharmacology Seventh EditionCopyright © 2019 Wolters Kluwer

a. Recommended Books and References (Scientific Journals, Reports, etc.)	Medical journal of pharmacy
b. Electronic Resources, Websites	Youtube / google

12. Curriculum Development Plan:
The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:

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* Crimes of the Ba'ath regime in Iraq:

Academic course description for the academic year 2025-2026 AD for the subject **(Crimes of the Ba'ath regime in Iraq)** Department of Community Health Technologies Stage (First or Second) Semester (First or Second).

This course description provides a concise overview of the key course characteristics and learning outcomes, demonstrating the teacher's ability to achieve them and maximize the use of available learning opportunities. It must include an explanation of the underlying principles and an alternative approach.

1.Educational Institution	**Al-Furat Al-Awsat Technical University – Polytechnic College of Karbala**
2.Department/Center	**Community Health Technologies**
3.Course Name/Code	CDVDLORS
9.Course Instructor:	Assistant Teacher Hussein Ali Mohammed Hussein
5.Available Attendance Forms	Classroom
6.Semester/Year	Level 1 / First Semester / 2025-2026
7.Total Credit Hours	Two hours per week
8.Date of Preparation of this Description	September 1, 2025

9.Course Objectives: By the end of the course, the student will be able to:

9. Course Objectives: The student will be able to:

a. Understand and identify the crimes of the Ba'ath regime in Iraq, their components, and review and emphasize the international documentation of these crimes and the most important relevant judicial rulings.

10. Course Outcomes, Teaching and Learning Methods, and Assessment:

* Course Outcomes:

1. Achieve international standards in education.
2. Emphasize self-respect and respect for others.
3. Provide, to the best of their ability, the ideal learning environment.

a. Cognitive Objectives: The student will be able to:

1. Understand the most significant crimes committed by the Ba'ath regime in Iraq.
2. Qualified students capable of in-depth study, equipped with scientific thinking skills and the ability to conduct academic research and investigate scientific truth in all fields.

B. Course-Specific Skills Objectives: The student will be able to:

Highlight the tragedies, calamities, and disasters inflicted upon our wounded country by the oppressive Ba'athist regime in Iraq.

Prepare research papers and reports by providing students with selected topics related to the

aforementioned course.

9. Objectives: The student will be able to identify:

B - Course Skills Objectives: Students will be able to:

C. Affective and Value-Based Objectives: The student will be able to:

D - General and transferable skills (other skills related to employability and personal development):

*** Teaching and Learning Methods:**

*** Assessment Methods: Students are assessed through:**

1. Daily exams (oral and written).
2. Preparing academic reports and participating in student discussions.
3. Midterm and final exams.

10. Course structure:

Weeks	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	Two hours	Understanding the meaning and nature of crimes and their relationship to other topics, including the categories of crimes. This includes delivering a lecture, asking students questions, and seeking clarification to ensure comprehension.	The Concept and Categories of Crimes	Whiteboard lectures	Oral Exam
Two hours	Two hours		Crimes of the Ba'ath Regime According to the Documentation of the Iraqi High Criminal Court Law of 2005	Smartscreen lectures	Oral Exam
Two hours	Two hours	Understanding all aspects of the crimes committed by the Ba'athist regime in Iraq, including their categories. This involves delivering a lecture, asking students questions, and allowing time for students to ask questions and seek clarification on the topic. Students are also required to prepare for the lecture.	Types of International Crimes	PowerPoint lectures	Seminar Preparation
Two hours	Two hours		Decisions Issued by the High Criminal Court	Video lectures	Oral Exam
Two hours	Two hours	Understanding the decisions issued by the Supreme Criminal Court. Delivering the lecture and asking students about the topic, posing questions to the students, and giving them time to ask questions and seek clarification on the topic, while requesting students to prepare.	Psychological Crimes	Whiteboard lectures	Oral Exam

Two hours	Two hours		Mechanisms of Psychological Crimes	Whiteboard lectures	Oral Exam
Two hours	Two hours	Identifying human rights violations	Effects of Psychological Crimes	Smartscreen lectures	Oral Exam
Two hours	Two hours	Identifying human rights violations	Social Crimes	Video lectures	Oral Exam
Two hours	Two hours	Identifying human rights violations	Militarization of Society	PowerPoint lectures	Oral Exam
Two hours	Two hours	Identifying human rights violations	The Ba'ath Regime's Stance on Religion	Whiteboard lectures	Oral Exam
Two hours	Two hours	Understanding and all related crimes of the Ba'ath regime in Iraq	Violations of Iraqi Laws	Whiteboard lectures	Written Exam
Two hours	Two hours	In Iraqi society	Forms of Human Rights Violations and Crimes of Power	PowerPoint lectures	Oral Exam
Two hours	Two hours	Understanding and all related crimes of the Ba'ath regime in Iraq, especially in religious affairs and the religious seminaries	Some Decisions Regarding Political and Military Violations by the Ba'ath Regime	PowerPoint lectures	Oral Exam
Two hours	Two hours	Identifying human rights violations	Prisons and Detention Centers of the Ba'ath Regime	PowerPoint lectures	Oral Exam
Two hours	Two hours	Understanding the relationship between psychological and social crimes in Iraq	Environmental Crimes of the Ba'ath Regime in Iraq	Video lectures	Oral Exam

11. Infrastructure:	
1. Required Textbooks	1. Dr. Hussein Alawi Nasser Al-Ziyadi, Geography of Crime: Principles and Foundations, Dar Al-Hasad, Damascus, 2015.
2. Main References (Sources)	
a. Recommended Books and References (Scientific Journals, Reports, etc.)	2. Dr. Hussein Alawi Nasser Al-Ziyadi and Dr. Abbas Attia Al-Quraishi, Environmental Crimes During the Ba'athist Regime, Iraqi Center for Documenting Extremist Crimes, Dar Al-Kafeel Printing House, Karbala, 2023.
b. Electronic Resources, Websites	

12. Curriculum Development Plan:

The curriculum and course content will be developed and updated based on scientific advancements and health issues affecting the country and the world. The following lectures will be added:

1. Expanding the vocabulary related to the crimes of the Ba'athist regime in Iraq by including terms pertaining to the most prominent relevant international agreements.

. Expanding the vocabulary related to these crimes in the constitutions of Arab and international states.

*Professional Ethics:

1. Course name	
ethics of the medical profession	
2. Course Code:	
3. Semester / Year:	
Second semester/second grade	
4. Description Preparation Date:	
16/2/2026	
5. Available Attendance Forms:	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Total number of hours : 2 hours (only theoretical)/total number of unit 2 units	
7. Course administrator's name (mention all, if more than one name)	
Sura Hussain Baket sora.iq454@gmail.com	
8. Course Objectives	
Course Objectives	Knowledge of basic ethics of medical Profession and qualifying the graduate for the best professional behavior to deal with his profession and compatibility with himself and his professional environment that consist of the patient,his companions and co-worker .
9. Teaching and Learning Strategies	
Strategy	-Cooperative education strategy. - Brainstorming education strategy. - Educational strategy, collaborative concept planning. - Strategy education real-time feedback - Education strategy by exchanging opinions and discussion. - Educational strategy by presenting information. - Education strategy through training and presenting scientific developments.

10. The theoretical structure of course

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First And Second	2	-Cooperative education strategy. -Brainstorming educat strategy. -Educational strategy,collaborative concept planning. - Strategy education real-time feedback -Education strategy exchanging opinions	First : Professional Behavior (definition , Concept , its Practical Application, Employment Relationship. Second : The principles	1.lectures. 2.visit Field . 3.methodo-Logical Training . 4.summer Training .	-Daily Exams. -Quarterly Exams. -final Exams. -practical Projects. d

		discussion. - Educational strategy presenting information. -Education Strategy through training presenting scientific developments.	of ethics in the stages of cultural and Islamic developments Patient etiquette hospitals.		
third	2	=	Behavioral Trends and Tendencies (definition, Classified , Factors Affecting them.		
Fourth		=			
Fifth	2	=	Values , Customs ,and Traditions. (definition,classified, Factors affecting them).		
Sixth	2	=	Personality patterns And how to deal with them.(definition , types , their relation ….)		
Seventh	2	=	-Basic ethics of the Medical profession -characteristics of Medical workers .		
	2		-moral and moral		

Eighth		=	Rights of patient . -moral and legal Rights of health professionals .		
ninth	2	=	-treatment behavior with patient -keeping the secrets Of the profession . -scheduling for Necessary action .		
Tenth	2	=	-how to handle Medical devices and Equipment . -daily access to Devices,tools,and Analyses. -preparing medicines For work .		
Eleventh	2	=	-Mental health Conditions . -the role of mental Health in diseases.		
Twelfth	2	=	Professional Compatibility and its Relationship to work.		
thirteenth	2	=	-work risk prevention -prevention of Pollution risk . -prevention of Infection risks .		
Fourteenth		=	-Avoid wrong Practices at work . Human , religious and		

Fifteenth	2 2 2	=	Democratic dimensi of health professions. The role of the medical association in the dissemination of health culture among members of community. -conditions of success Of the medical Associate during his Policing. Apps in professional Behavior		

10.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	
11.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Medical Ethics Manual 2nd edition 2009 by The Wo Medical Association 'Inc.
Main references (sources)	Professional behaviour of community Health students /by prof. Dr. Tari Tariq alzubaidi .
Recommended books and references (scientific journals, reports...)	Medical conduct of doctors/ By alhakeem Raji Al-teqriti .
Electronic References, Websites	https ://ikr.atu.edu.iq the official website of the technical institute

*** English:**

1. Course Name: English Language	
2. Course Code:	
3. Semester / Year: First year / Second semester	
4. Description Preparation Date: 18/12/2025	
5. Available Attendance Forms: Present	
6. Number of Credit Hours (Total) / Number of Units (Total)	
2 Theoretical / Number of Total unit 4 unite	
7. Course administrator's name (mention all, if more than one name)	
Name: Assist. Dywan Hussein Wady **Diwan.ikr@atu.edu.iq**	
8. Course Objectives	
Course Objectives	**General Objectives** The student will be able to know medical English in general **Special Objectives** - Define and identify the functions of Root, Suffixes and Prefixs in medical terms, - Pronounce medical terms containing root, suffixes and prefixes properly and analyze medical terms into their components - Read and write definitions of medical terms, diseases, and medical procedures - differentiate between the terms system, organ, and tissue - Paraphrase a sentence or a paragraph - Write a referral letter and prepare an oral presentation
9. Teaching and Learning Strategies	
Strategy	- Cooperative education strategy. - Brainstorming education strategy. - Educational strategy, collaborative concept planning. - Strategy education real-time feedback - Education strategy notes series. - Education strategy by exchanging opinions and discussion. - Educational strategy by presenting information. - Education strategy through training and presenting scientific developments.

10. The theoretical structure of the course

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First & Second	2	- Raising the level of motivation for learning in its various types: internal motivation, social motivation, and achievement motivation. - Creating opportunities to	- Medical terms (human body) - Root - suffixes	1. Lecturer 2. Scientific Lab 3. Systematic training. 4. Summer	1. Daily Quick Quiz 2. 2. Oral exams 3. Theoretical exam 4. Reports

		implement a collective planning approach to the curriculum, and for cooperation among faculty members to identify gaps and repetitions.	and - prefixes.	training	5. dissuasion
Third	=	=	Spelling of medical terms	=	=
Fourth	=	=	- Pronouncing of medical terms - Pronounce exercise	=	=
Fifth	=	=	Vocabulary development (medical vacobulary)	=	=
Six & Sev	=	=	reading	=	=
Eighth and Ninth	=	=	Writing	=	=
Tenth and Elenth	=	=	grammar	=	=
Twelfth & Thirteenth	=	=	Oral communicatic	=	=
Fourteenth	=	=	Review	=	=
Fifteenth	=	=	Final exam	=	=

The practical structure of the course
No Practical Structure Theory only
10. 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
11. Learning and Teaching Resources

Required textbooks (curricular books, if any)	English for medicine and health science By shehde and Fareh
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Internet
Electronic References, Websites	**(https://ikr.atu.edu.iq)**