



21 September University for Medical and Applied Sciences
Deanship of Higher Studies
Faculty of High Nursing
Department: Family and Community Health Nursing



Master of Public Health in Epidemiology

Program Specifications

2023

Head of Department

Quality Unit

Dean of the Faculty

Center of Development & Quality Assurance

Rector



1. General Information:		
1.	Program Name	Master of Public Health in epidemiology (MPH)
2.	Program Code & Number:	
3.	Program Type	3 Semesters and Thesis
4.	Total Credit Hours	43
5.	Program Period	2 years
6.	Awarding Institution	21 September University of Medical and Applied Sciences Faculty of Nursing
7.	Awarded Degree	Master's degree
8.	Study System:	Regular, minimum attendance 75%
9.	Teaching language	English and Arabic
10.	Departments participating in the program:	Medicine, Pharmacy, Nursing, Laboratory, Dentists and Medical administration.
11.	Location of teaching:	21 September University of Medical and Applied Sciences -Faculty of Nursing – Sana'a Yemen
12.	Date of Preparation:	June 2023
13.	Prepared by:	1. Professor: Mujahed Ali Messar 2. Professor: Abdulsalam Saeed Al-Akel 3. Prof. Abdulsalam Dallaq 4. Prof: Abdulhameed Aldhyhaifani 5. Assistant prof / Muneer Al- Wesabi 6. Assistant Prof/ Fares Ali Mohammed Mahdi
14.	Council Approval Date	

2. Introduction:

The Master of Public Health in Epidemiology program (MPHE) on 21 September University has been established in 2023. The program intended for Health Care Providers (GP, Nurses, Laboratory. Pharmacy, Medical administration, and Dentists) wishing to undertake a specialist qualification in MPH. The master Public Health in epidemiology program aims to prepare future leaders in PH who provide safe, comprehensive evidence-based care to the community and to improve the health status of the population, which is to be achieved by providing Public Health in Epidemiology and health care professionals with a high quality postgraduate training programme in Public Health in epidemiology

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5. Department Vision, Mission, and Objectives :

5.1. Vision of the Department :

To train health professionals through Bio-Psycho-Social Model and develop human resources required for meaningful, multidisciplinary health care.

5.2. Mission of the Department:

Prepare skilled Public Health in epidemiology and Epidemiology care providers as a clinician, educator, leader and researcher that strengthen the Community and wellbeing of individual and society.

5.3. Objectives of the Department:

1. To impart essential knowledge, attitude and skills to provide quality services in communities.
2. To empower learners to respond to health needs in the cultural context using existing facilities.
3. To develop skills for collaboration with community-based groups towards health promotion
4. To make students aware of the role of care providers in health care delivery systems and Epidemiology.
5. To promote research mindedness in learners through the use of epidemiological methods.
6. Develop post graduate staff professionals, who promote, preserve, and maintain the health of population through delivery of health services to individual family and community at large.
7. Develop ability to identify and utilize community resources in meeting the health needs of society and collaborate with other disciplines, agency to integrate and improve services at local, state and national level

6. Master Public Health in epidemiology Program Mission and Objectives:

6.1. Program Mission:

To bring a qualitative and quantitative revolution in public health in epidemiology education by providing an environment geared towards promoting research and academic culture in order to improve the existing healthcare system and contributing to developing and serving the community.

6.2. Program Objectives:

6.2.1 General Objectives:

The purpose of the MPH programme aims to improve the health status of the population through the provision of public health and health care professionals with a high-quality postgraduate training programme in public health sciences-oriented epidemiology. The program will provide knowledge on



health, determinants of health, distribution of diseases and disorders and factors responsible for such health and disease pattern in the population.

6.2.1. Specific Objectives

1. To impart theoretical and practical knowledge in the field of public health in epidemiology and to develop ability to use methods and techniques of various life sciences disciplines in the field of public health in epidemiology.
2. **Demonstrates** a solid knowledge base with the capability to analyze public health problems related to diseases, disorders, and related community issues.
3. **Evaluate** interventions and policy alternatives used in solving- health-related problems within the financial, socio-cultural, environmental and political framework of Yemen and its surrounding region.
4. **Comprehensive** understanding of various components of social determinants of health and health inequity.
5. Plan, manage, monitor, and evaluate interventions in the field of public health.
6. **Utilize/apply** the concepts, theories, and principles of public health in epidemiology science and demonstrate advance competence in practice in the field of public health.
7. **Enhance** evidence-based decision making through conducting public health research, interpreting, and utilizing the findings from health-related research.
8. Demonstrate the ability to plan and effect change in public health in epidemiology practice and in the health care delivery system.
9. **Apply** current research methods in key areas of chronic disease epidemiology, infectious disease epidemiology and environmental exposure.
10. Play as an advocator of public health policies and communicate public health messages to diverse audience effectively.
11. **Create** interlinkages between health and development at local, national, and global levels, and be able to apply that in health program planning.

7. Program Standards & Benchmarks:

Academic Standards:

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Program Benchmarks:

1. University of Drexel
<https://drexel.edu/dornsife/academics/degrees/online-mph-in-epidemiology/>
2. University of East Tennessee State
https://catalog.etsu.edu/preview_program.php?catoid=37&poid=12625
3. University of Eastern Virginia Medical School and Old Dominion.
https://www.evms.edu/education/masters_programs/graduate_program_in_public_health/tracks_certificates/epidemiology_track/
4. Harvard University
<https://www.hsph.harvard.edu/admissions/degree-programs/online-mph-in-epidemiology>
5. King Saud Abdul-Aziz University - College of Public Health in epidemiology and Health Informatics
<https://www.ksau>
6. Jordan University of Science and Technology- Jordon
<https://www.just.edu.jo/ar/FacultiesandDepartments/FacultyofMedicine/Departments/CommunityMedicine>
7. Al-Razi University –Yemen
<https://alraziuni.edu.ye/posts>



8. Graduate Attributes:

Upon successful completion of an postgraduate Master degree in Public Health in epidemiology program, graduates will be able to:

- 1- **Care provider (function role):** In community health practice, providing care is different than in communities, this is because the target of service expands beyond the individuals to include families, groups and communities.
- 2- **Educator:** Health teaching is considered one of the major functions of the public health in epidemiology workers, Teaching is a necessary role function for health promotion, health maintenance, prevention of disease and welfare to individuals and societies; this could be achieved by sharing information clinics or informally at home
- 3- **Advocator:** The public health in epidemiology workers acts as advocate for the individual, group, or community client. The role of the public health in epidemiology workers in client advocacy is to help the client to gain greater independence and direct the health care system to the needs of the client by influencing change.
- 4- **Researcher:** The researcher role is an integral part of public health in epidemiology practice, it helps to identify needs, evaluate effectiveness of care, and develop theoretical basis for public health in epidemiology practice.
- 5- **Epidemiologists:** The study the distribution and determinants of health and disease in populations.



9. Program Intended Learning Outcomes (PILOs):

A. Knowledge and Understanding:

Upon successful completion of the postgraduate master's degree in public health in epidemiology & Epidemiology Program, the graduates will be able to:

- A1. **Demonstrate** adequate knowledge and skills to epidemiology and a wide range of public health topics, health promotion, health management, PHC and RHC, nutrition, demography, monitoring and evaluation of health programs, occupational and environmental health.
- A2. **Discuss** appropriate documentation of fundamental principles of public health and epidemiology and acquire knowledge on the concept and principles of modern technologies of public health in epidemiology practice and research.
- A3. Identify major contribution of epidemiology and PH in the domain of health promotion and disease preventing and control
- A4. **Identify** of Public Health in epidemiology applied to maximizing population health gain from the exploration, understanding, and limiting of modifiable risk factors for disease;
- A5. **Recognize** research techniques, including an understanding of the strengths and limitations of epidemiological methods, biostatistics as well as those of other Public Health in epidemiology methods for population health improvement;
- A6. **Describe** knowledge and understanding of the essential facts, concepts, principles and theories relevant to the student's chosen research project and management and communication skills, including problem definition, project design and management, decision processes, teamwork, written and oral reports, scientific publications
- A7. Understand and apply ethical principles in research and evaluation

B. Cognitive/ Intellectual Skills:

Upon successful completion of the postgraduate master's degree in public health in epidemiology Program, the graduates will be able to:

- B1. **Analysis** a management plan for common community disease and epidemiology surveillance.
- B2. **Compare** between basic and applied Public Health in epidemiology in terms of the various underlying approaches and the range of skills required to carry out Public Health action and be creative in the solution of community problems and in generating and testing of hypotheses.
- B3. **Explore** to appropriate investigations between Endemic, Outbreak, Epidemic, and pandemic and how to be controlled and prevented.



C. Practical and Professional Skills:

Upon successful completion of the postgraduate master’s degree in public health in epidemiology & Epidemiology, the graduates will be able to:

- C1. Perform epidemiological studies and use most common Public Health in epidemiology care modalities, equipment and monitoring technique used in various situations in the Community.
- C2. Apply preventive, promotive, rehabilitative and palliative services to the people and undertake evidence-based research and application of knowledge into practice in public health.
- C3. Analyze the roles of socio-economic factors in health inequity.
- C4. Apply scientific research methods and apply appropriate measurement and data analysis techniques to evidence underpinning the study of Public Health in epidemiology and Epidemiology.
- C5. Demonstrate respect to different cultures, religions and values and manage all patients equally regardless of their backgrounds.

D. General and Transferable Skills:

Upon successful completion of the postgraduate Master degree in Public Health in epidemiology & Epidemiology program , the graduates will be able to:

- D1. Develop a lifelong interest to continue learning, improve skills, acquire, and apply up-to-date knowledge and new skills work.
- D2. Communicate clearly and effectively with patients, their families, health care professionals and the community through verbal, written or digital methods.
- D3. Use of computer and statistical software program to entry, analysis, presentation and interpretation of data and explore practice, ethical, legal and interpersonal dimensions within the Communities.

10. Alignment of Program’s PILO’s with Program’s Objectives

Program PILOs	Program Objectives				
	PObj1	PObj2	PObj3	PObj4	PObj5
A1	√			√	√
A2		√		√	
A3		√	√		√
A4		√		√	
B1	√		√		√
B2		√		√	
B3			√		√
C1	√	√		√	
C2		√			√

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Program PILOs	Program Objectives				
	PObj1	PObj2	PObj3	PObj4	PObj5
C3	√		√	√	
C4		√		√	
D1		√			√
D2	√		√	√	
D3		√	√		√

11. Teaching Strategies

Teaching Strategy	Description
Interactive lectures	These are interactive lectures weekly conducted in the class and supported with variety of teaching formats including, lectures and multimedia presentations, use of whiteboard to solve examples and illustrating different tasks and problems introduced by the presentation, and class discussions, in which concepts, approaches, and case studies are presented, explored, and shown students what they need to know.
Seminars	These are mainly used with small groups of students in which they find better Used in all courses chances for discussing and participating in the (MPHE) teaching process
Group projects	About 2 to 3 students are working on a project, it promotes teamwork skills.
Role Plays	Students assume one of the roles in a simulated situation in order to experience different points of view or positions.
Brainstorming	It is a technique for refining the definition of a problem, generating solutions to a problem or getting into the points. It promotes creative and critical thinking.
Case study	A detailed analysis is made of some specific, usually compelling event or series of related events so that learners will better understand its nature and what might be done about it.
Field training	Observations made or work carried on in a natural setting.



3.		Environmental health	2	2			
4.		Occupational health	2	2			
5.		Health Management	3	2			
6.		Primary Health Care (Maternal and child Health)	3	2			
7.		Nutritional Health	2	2			
8.		Medical Demography	3	2		3	
9.		Principle of Epidemiology	3	2			
10.		SAS for Epidemiological Research	3	2		3	
11.		Social Epidemiology	3	2		3	
12.		Principle oh Biostatistics	3	2		3	
13.		Epidemiology of Communicable Diseases	3	2	2	3	
14.		Epidemiology of Non-Communicable Disease	3	2	2	3	
15.		Research Methodology	3				
16.		Field Training	2			6	
Total			43	28	4	27	

* L= lecture ** T=tutorial/seminar, *** P= lab/workshop/training/clinical

* **Community Action-based Project addressing Strategically-Themed learning Objectives through Networked Environments** * SAS: Statically Analysis System .

14.1 Program Major

Compulsory Courses

No.	Level-Sem.	Course Code	Course Name	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1			Fundamentals of Public Health	3	2		3	
2			Global Health	2	2			
3			Environmental health	2	2			
4			Occupational health	2	2			
5			Health Management	3	2			
6			Primary Health Care (Maternal and child Health)	3	2			
7			Nutritional Health	2	2			
8			Medical Demography	3	2		3	
9			Principle of Epidemiology	3	2			
10			SAS for Epidemiological Research	3	2		3	
11			Social Epidemiology	3	2		3	
12			Principle oh Biostatistics	3	2		3	
13			Epidemiology of Communicable Diseases	3	2	2	3	

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No.	Level-Sem.	Course Code	Course Name	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
14			Epidemiology of Non-Communicable Disease	3	2	2	3	
15			Research Methodology	3				
16			Field Training	2			6	
				43	28	4	27	

Field Training Courses (if any)									
No	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1									
Total									

14.2. Study Plan:

First Year

Semester I

No.	Level-Sem.	Course Code	Course Name	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1			Fundamentals of Public Health	3	2		3	
2			Global Health	2	2			
3			Environmental health	2	2			
4			Occupational health	2	2			
5			Health Management	3	2			
6			Primary Health Care (Maternal and child Health)	3	2			
Total				15	12	0	3	

Semester II

No.	Level-Sem.	Course Code	Course Name	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1			Nutritional Health	2	2			
2			Medical Demography	3	2		3	
3			Principle of Epidemiology	3	2			
4			SAS for Epidemiological Research	3	2		3	
5			Social Epidemiology	3	2		3	
Total				14	10		9	

Semester III

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No.	Level-Sem.	Course Code	Course Name	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1			Principle oh Biostatistics	3	2		3	
2			Epidemiology of Communicable Diseases	3	2	2	3	
3			Epidemiology of Non-Communicable Disease	3	2	2	3	
4			Research Methodology	3				
5			Field Training	2			6	
Total				14	6	4	15	

NO	Corse Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
		Master Thesis		9		0	12	
Total				9	0	0	12	

1. Admission/Selection/Transfer Requirements:

Admissions to the program shall be made as per the admission rules made by Ministry of higher education and scientific Research-Yemen Republic and 21 September University

- Specialties allowed to enroll in this plan are holders of the Bachelor Degree in Nursing, Medicine, pharmacy, Dentist, laboratory and Medical administration of any university.
- Have a minimum of one years of experience after obtaining B.Sc.

Satisfactory outcome of an interview evaluating background and suitability for a Public Health in epidemiology specialist.

2. Graduation Requirements:

- The number of hours required to complete the program: 40 credits hours

3. Grading System:

From 90% to 100% from total marks	Excellent
From 80% to 89%	Very Good
From 75% to 79%	Good
From 65% to 74%	Pass
Less than 65%	Poor/Fail

4. Academic Staff

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Academic Staff Requirement	Professor	Associate Professor	Assistant Professor
Academic Staff Available	2	3	3

5. Program Assessment:

Type of the Sample who Assess the program	Instruments used	Sample
1 Final year students	Questionnaire 1	10%
2 Graduate students	Questionnaire 1	10%
3 Stakeholders	Questionnaire 2	10%
4 Academic staff	Workshop	100%
5 External Evaluator	Feedback & Comments	100%
6 Final year students	Questionnaire 1	10%

6. Program Policies:

Based on University Regulations

1. **(Class Attendance) :**

A student should attend not less than 75 % of total hours of the subject; otherwise he/she will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university Clinic. If the absent is more than 25% of a course total contact hours, student will be required to retake the entire course again.

2. **(Tardy) :**

For late in attending the class, the student will be initially notified. If he repeated lateness in attending class he/she will be considered as absent.

3. **(Exam Attendance/Punctuality) :**

A student should attend the exam on time. He/she is permitted to attend an exam half one hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.

4. **(Assignments & Projects) :**

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	Assignments and projects are given as per course specification; the student has to submit all the assignments for checking on time, mostly one week after given the assignment.
5.	(Cheating) : For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study the student will be disengaged from the Faculty.
6.	(Plagiarism) : Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed a plagiarism of a student, he/she will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student Council Affair of the university or according to the university roles.
7.	(Other policies) : <ul style="list-style-type: none">- Mobile phones are not allowed to use during a class lecture. It must be closed; otherwise the student will be asked to leave the lecture room.- Mobile phones are not allowed in class during the examination.- Lecture notes and assignments might be given directly to students using soft or hard copy.

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ملاحظات لجنة التقييم الإجمالية على المعيار (يبدأ من قبل لجنة التقييم).

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