# Public health; code PM 906

## **A-Basic Information**

<b>Programme(s) on which the course is given:</b> Bachelor of Pharmacy (Pharm D)			
Department responsible for offering the course:	Microbiology & Immunology		
Department responsible for teaching the course:	Microbiology & Immunology		
Academic year:	Level 5- first semester		
Course title and code:	Public health; code PM 906		
Contact hours (credit hours):	Lecture: 2(2), Total: 2(2)		
Course coordinator	Dr. Yomna Nagy		

## **B- Professional Information**

The course aim and learning outcomes are based on that mentioned in the programme specifications, with more course-related specific details.

## 1 - Overall Aims of Course

By the end of this course, the students should:

- Know and understand all scientific disciplines and possession of skills and beliefs that are required for health promotion & preservation of the public efficiently and correctly.
- Be acquainted with all programs and activities directed at the community level.
- Be able to design protective plans and give advice regarding communicable and non-communicable diseases, social, mental, occupational and environmental health.

## 2 - Course Learning Outcomes of Course (CLOs)

Program Key element	Course learning outcomes
Domain 1: Fundamental Knowledge The student should be able to:	
<b>1.1.1.2.</b> Manifest understanding of social, behavioral, and administrative sciences.	<b>1.1.1.2.</b> Reveal the information about different preventive and protective measures including vaccination programs implement of health maintenance and improvement.
<b>1.1.2.1.</b> Utilize medical, pharmaceutical & statistical terms in pharmacy practice.	<b>1.1.2.1.</b> Understand the etiology and terms used to measure epidemiology of major communicable and non-communicable diseases.
<b>1.1.4.2.</b> Articulate information from fundamental sciences to evaluate the appropriateness, and effectiveness of drugs in populations.	<b>1.1.4.2.</b> Retrieve the various practices implemented for maternal, pediatric and geriatric health.
<b>1.1.5.</b> Retrieve knowledge from basic sciences to solve therapeutic problems.	<b>1.1.5.</b> Merge knowledge to relate The various clinical conditions to mental health and mental retardations as well as to malnutritional status.

<b>1.1.6.1</b> . Interpret scientific literature to enhance professional decision.	<b>1.1.6.1.</b> Make use of clinical sciences in control of various diseases.		
<b>1.1.7.2.</b> Identify and analyze emerging issues influencing patient health care.	<b>1.1.7.2.</b> Understand The etiology, epidemiology, and control of various occupational, environmental diseases.		
DOMAIN 2: PROFESSIONAL AND ET The student should be able to:	THICAL PRACTICE		
<b>2.1.1.</b> Perform responsibilities and authorities of all members of the health care team in compliance with the legal and professional structure.	<b>2.1.1.</b> Apply the knowledge of each member of the health care team in making decisions related to medications and vaccination for the purpose of prevention and control of both communicable and non-communicable diseases.		
2.2.4.1. Implement the principles of pharmaceutical calculations, biostatistical analysis, and their applications in new drug delivery systems, dose modification, bioequivalence studies, and pharmacy practice.	<b>2.2.4.1.</b> Use numeracy, calculation and statistical methods as well as information technology tools to measure and evaluate different approaches implemented for community health.		
<b>2.5.2.1.</b> Reclaim pharmaceutical information needed in pharmacy profession.	<b>2.5.2.1.</b> Analyze and interpret information needed for health promotion of the public.		
DOMAIN 3: PHARMACEUTICAL CA The student should be able to:	RE		
<b>3.1.2.2.</b> Illustrate the principles of public health to assess proper methods of infection control.	<b>3.1.2.2.</b> Explain the principles of pharmaceutical microbiology to pick appropriate infection control strategies		
<b>3.1.4.</b> Associate the etiology, spreading, pathophysiology, laboratory diagnosis, and clinical presentation of infections/diseases to their pharmacotherapeutic approaches.	<b>3.1.4.</b> Understand The etiology, epidemiology, and control of both communicable and noncommunicable diseases.		
3.2.5. Educate and guide patients, other health care professionals, and communities about safe and proper use of medicines including OTC preparations and medical devices.	<b>3.2.5.</b> Determine proper method for health promotion, disease prevention and encouraging self-care.		

<b>3.2.6.</b> Keep public awareness of drugs misuse	<b>3.2.6.</b> Maintain public knowledge of the dangers
and abuse and their social health hazards.	of drug misuse and abuse, as well as their social
	complications.
DOMAIN 4: PERSONAL PRACTICE	
The student should be able to:	
<b>4.2.1.</b> Effectively communicate with	<b>4.2.1.</b> Communicate clearly by verbal and means
professional health care team, patients, and	and express complex issues in terms that lay
	people can understand for health promotion of
communities.	the public.
<b>4.3.2.</b> Perform self-learning needed for	<b>4.3.2.</b> Engage in continuous learning in order to
continuous professional development.	keep up with all the developments that related to
processional development.	the infections and their control.

# **3 - Course Contents**

Week No.	Topic	Contact
		hours
1	General introduction to public health,     Epidemiology	2
2	Control of acute communicable disease	2
3	<ul> <li>Epidemiology and control of non-infectious diseases.</li> </ul>	2
4	<ul><li>Occupational diseases</li><li>Sexually transmitted diseases.</li></ul>	2
5	Midterm	
6	Mental health, mental retardation	2
7	Nosocomial infections	2
8	<ul> <li>Smoking: public health threat</li> <li>Family health</li> <li>Disaster and public health</li> </ul>	2
9	<ul><li>Food microbiology</li><li>Microbiology of milk.</li></ul>	2
10	<ul><li>Water supply and sanitation</li><li>Waste disposal.</li></ul>	2
11	<ul><li>Zoonosis</li><li>Bioterrorism</li></ul>	2
12	Formative assessment	2
Total hrs	22	

# 4- Teaching and Learning Methods

• Lectures (Tools: board, overhead projector, data show). Lectures (live-interactive meetings in addition to recorded online sessions).

## 5- Student Assessment Methods

Written Midterm exam	To assess	The ability of students to follow-up the course subjects.
Written final exam	To assess	The overall outcomes.
Oral exam	To assess	The overall outcomes

#### **Assessment Schedule**

Assessment 1	Periodic exams	Week 5
Assessment 2	Oral exam	Week 14
Assessment 3	Final written exam	Week 14

# Weighing of assessments

Total	100
Oral Examination	10
Final-written exam	75
Periodic exams	15

## 6- List of References

#### 6.1- Course notes

Lecture notes of public health prepared by the instructors.

### 6.2- Essential books (text books)

- Public health & Preventive medicine; 15<sup>th</sup> edition; Eds. Robert B. Wallace, Bradley N. Doebbeling (2008).
- Oxford Textbook of Public Health; 6<sup>th</sup> edition; Eds. Roger Detels, James MacEwen, Robert Beaglehole and Haizo Tanaka (2015)

#### **6.3-Recommended books**

- Public health & Preventive medicine; 15<sup>th</sup> edition; Eds. Robert B. Wallace, Bradley N. Doebbeling (2008).
- Oxford Textbook of Public Health; 6<sup>th</sup> edition; Eds. Roger Detels, James MacEwen, Robert Beaglehole and Haizo Tanaka (2015)

### 6.4- Periodicals, Web sites, ...etc

Publichealthy.com, www.ncbi.nlm.nih.gov

# 7- Facilities Required for Teaching and Learning

- Study halls, Data show, books, audiovisual tools.
- LMS system (Classroom).

Course Coordinator: Dr. Yomna Nagy Yomna Nagy

Head of Department: Assoc. Prof. Dr. Sarra Ebrahim Saleh Sanna Saleh

Course name	Public health;		
code	PM 906		

# **Course Plan & Matrices**

Cou	irse Contents	Program key element	Course learning outcomes	Teaching and Learning Methods	Student Assessment Methods
Week # 1	General introduction to public health, Epidemiology	1.1.1.2 1.1.2.1 1.1.6.1 1.1.7.2 3.1.4 4.3.2	1.1.1.2 1.1.2.1 1.1.6.1 1.1.7.2 3.1.4 4.3.2	Lecture Open discussion	Written Oral
Week # 2	Control of acute communicable disease	1.1.1.2 1.1.2.1 1.1.6.1 1.1.7.2 2.1.1 2.2.4.1 3.1.2.2 3.1.4	1.1.1.2 1.1.2.1 1.1.6.1 1.1.7.2 2.1.1 2.2.4.1 3.1.2.2 3.1.4	Lecture Open discussion	Written Oral
Week # 3	Epidemiology and control of non-infectious diseases.	1.1.1.2 1.1.2.1 1.1.6.1 1.1.7.2 2.2.4.1 3.1.2.2	1.1.1.2 1.1.2.1 1.1.6.1 1.1.7.2 2.2.4.1 3.1.2.2	Lecture Open discussion brain storming Assignments	Written Oral
Week # 4	Occupational diseases Sexually transmitted diseases.	1.1.6.1 1.1.7.2 3.1.2.2 4.3.2	1.1.6.1 1.1.7.2 3.1.2.2 4.3.2	Lecture	Written Oral
Week # 5	Midterm exam				
Week # 6	Mental health, mental retardation	1.1.5 2.5.2.1 3.2.5 4.2.1	1.1.5 2.5.2.1 3.2.5 4.2.1	Lecture	Written Oral
Week # 7	Nosocomial infections	2.1.1 2.2.4.1	2.1.1 2.2.4.1 2.5.2.1	Lecture	Written Oral

	Smoking: public	2.5.2.1 3.2.5	3.2.5	Open discussion brain storming Assignments	Written
Week # 8	health threat Family health Disaster and public health	1.1.1.2 1.1.4.2 2.1.1 3.2.6 4.2.1 4.3.2	1.1.1.2 1.1.4.2 2.1.1 3.2.6 4.2.1 4.3.2	Lecture Assignments Case studies	Oral
Week # 9	Food microbiology Microbiology of milk.	2.2.4.1 2.5.2.1 3.2.5 4.3.2	2.2.4.1 2.5.2.1 3.2.5 4.3.2	Lecture Open discussion	Written Oral
Week # 10	Water supply and sanitation Waste disposal.	2.2.4.1 2.5.2.1 3.2.5 4.3.2	2.2.4.1 2.5.2.1 3.2.5 4.3.2	Lecture Case studies	Written Oral
Week # 11	Zoonosis Bioterrorism.	2.2.4.1 3.2.5 4.3.2	2.2.4.1 3.2.5 4.3.2	Recorded Lecture Assignments	Written Oral
Week # 12	Formative assessment	2.2.4.1 3.2.5 4.3.2	2.2.4.1 3.2.5 4.3.2	Tutorial	Written Oral

In case of emergency or necessity, the study will be converted into recorded and interactive lectures.