Syllabus: Introduction to Public Health **(111501209)**

Summer Semester 2024- /2025

COURSE INFORMATION	
Course Name: Introduction to Public Health **Semester:** Summer Semester **Department:** Department of Pharmacology, Public health and clinical skills**.** **Faculty:** Faculty of Medicine	**Course Code:** 111501209 **Section:** Preclinical course. **Core Curriculum**: MD program
Day(s) and Time(s): **Sunday:** 9:20-10:35 a.m. Then 10:40-11:55a.m **Monday:** 9:20-10:35 a.m. Then 10:40-11:55a.m **Tuesday:** 9:20-10:35 a.m. Then 10:40-11:55a.m **Wednesday:** 9:20-10:35 a.m. Then 10:40-11:55a.m **Classroom:** Medicine Hall**,** Allied Medical Sciences Hall**.**	**Credit Hours:** 3 **Prerequisites**: None

COURSE DESCRIPTION

This course is an introductory course designed to familiarize undergraduate students from various disciplines with the fundamentals of public health. It will help students develop skills and adopt an attitude that views the community as the primary focus of care, using the Primary Health Care approach. Students will learn to take responsibility for health promotion and disease prevention as part of a holistic health care strategy. The course provides an overview of community medicine, epidemiology, primary health care, mother and child health (MCH), and the health care system. Additionally, it will enable students to describe the chain of infection for communicable diseases and analyze epidemic patterns. The course will also prepare students to assess environmental risks and understand the public health response to disaster management.

DELIVERY METHODS

The course will be delivered through a combination of active learning strategies. These will include:

- PowerPoint lectures and active classroom-based discussion
- Video lectures
- E-learning resources: e-reading assignments and practice quizzes through Model and Microsoft Team

FACULTY INFORMATION

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Academic Title:	Lecturer
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Office Hours:	Monday: 8:00-9:00 a.m. Tuesday: 8:00-9.00 a.m. Monday: 12:00-13:00 p.m. Tuesday: 12:00-13.00 p.m.

REFERENCES AND LEARNING RESOURCES

1- Community medicine with recent advances
Author: Suryakantha, AH.
Publication: Jaypee Brothers Medical Publishers, New Delhi: 2025.
Edition: 8th ed.

2- Scutchfield & Keck's Principles of Public Health Practice
Author: Paul C. Erwin & Ross C. Brownson (continuing principles of Scutchfield & Keck)
Publication: Cengage Learning
Edition: 4th ed.

3- Epidemiology Kept Simple Book
Author: B. Burt Gerstman
Publication: Wiley & Sons
Edition: 3rd ed.

4- Selected articles and handout documents on public health (will be available to students as paper or e versions).

STUDENT LEARNING OUTCOMES MATRIX*

Core Curriculum Learning Outcomes	Program Learning Outcomes	Course Objectives	Course Student Learning Outcomes	Assessment Method
CC-LO-1 Think critically and creatively in a variety of methods in order to make decisions and solve problems.	PH -LO-1: Apply critical thinking and demonstrate problem-solving skills in two or more of the major fields of Public Health.	1. Develop an understanding of the basic principles of the major aspects of Public Health.	1. Understand the concept and The meaning of Public Health. 2-Identify the aims and objectives of Public Health.	• Exams • Quizzes • "On-line reading assignments • homework assignments
		2. Obtain a thorough foundation in the various fields of Public Health.	2. Describe Public Health development and achievements. 3. Identify the components of Public Health. 4. Identify the role of a Public Health physician in the improvement of health.	• Exams • Quizzes • "On-line reading assignments
		3. Learn to prevent health problems by different prevention methods.	3.1. What is meant by primary, secondary, and tertiary prevention? 3.2. Give examples on prevention levels. 3.3. Explain the role of health education and promotion in health improvement. 3.4. Explain the role of screening as secondary prevention. 3.5. Assess the validity of a screening test.	• Exams • Quizzes • "On-line' reading assignments • homework assignments
		4. Understand the measures of population health, fertility rates,	4.1. Understand and calculate different rates, fertility rates, mortality rates and morbidity rates.	• Exams • Quizzes

		mortality rates, and morbidity rates.		• "On-line reading assignments • homework assignments.
CC-LO-2. Communicate competently with others using oral and written English skills CC-LO-2. Demonstrate competency in the use of research skills and various information sources. CC-LO-4. Identify the general concepts of Public Health and its value in maternal and child health.	PH-LO- 2: Use modern literature search methods to obtain information about Public Health topics and write reports.	5. Obtain an understanding of the role of Public Health in other disciplines, and its importance of primary health care services, and understand different primary health care programs and its role in the improvement of the health status of the population.	5.1. Acquire the ability to learn independently; articulate the importance of independent learning for future professional development. 5.2. Recognize the various types of health services. 5.3. Describe the principles of primary health care. 5.4. Identify the component of primary health care 6.1. Identify the different Services available in the MCH centre for children under five. 6.2. discuss the importance of maternal services, antenatal, natal and postnatal care. 6.3. identify the main maternal health problems. 6.4. identify high risk pregnancy. 6.5. Discuss the importance of family planning program 6.6. recognize the essential activities for birth control services. 6.7. discuss the importance of School health services and identify the most important school health services.	• "Online" reading assignments
	PH-LO-3: Communicate results to Public Health and	7. Acquire positive attitudes towards further studies in Public Health and	7.1. Develop a positive attitude towards Public Health and its applications in society, and	On-line' reading assignments

	maternal and child health. PH-LO-4: The course will shed the lights on the implications of studying role of Public health in disease prevention by vaccination.	towards the application of public Health in other disciplines. 7. identify the schedule of EPI.	towards further study and lifelong learning. 7.2. discuss the important of Vaccination. 7.3. Develop a positive attitude towards vaccination and its applications in society and explain its role in prevention of communicable diseases. 7.2. identify the different contraindication to vaccinations.	Home-work assignments.
CC -LO-5: Identify the general concepts of Public Health and its value in the control of communicable diseases.	PH- LO- 5: The course will shed the lights on the implications of studying role of public health in the control and prevention of communicable diseases.	8. identify the chain of infection and its role in the detection of infections.	8.1. identify portal of entry. 8.2. identify modes of transmission. 8.3. identify portal of exist. 8.4. Epidemic Disease Occurrence, and epidemic patterns. 8.5. Determine and investigate an epidemic with steps.	• On-line' reading assignments Home-work assignments.
CC-LO-6: Identify the general concepts of Public Health and its value in environmental sanitation.	PH- LO-6: identify some environmental health topics.	9. Understand environmental health topics.	9.1. Understand the concept of environmental risk assessment. 9.2. Discuss some environmental health topics: global warming, food and water sanitation.	• "On-line' reading assignments • homework assignments.
CC-LO-7: Identify public health response to	PH- LO-6: identify disaster management and emergency preparedness.	10. Understand disaster management and emergency preparedness.	10.1. Demonstrate steps of emergency preparedness, mitigation, and disaster management idea.	• "On-line' reading assignments • homework assignments.

disaster management.				

ACADEMIC SUPPORT

It is the Hashemite University policy to provide educational opportunities that ensure fair, appropriate, and reasonable accommodation to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to contact their instructor to ensure that their individual needs are met. The University, through its Special Needs section, will exert all efforts to accommodate individuals' needs.

Special Needs Section: Student Services and Care Unit
Tel: 053903333 ext. 4132 / 4583 / 5023
Location: Deanship of Student Affairs
Email: **stydent@hu.edu.jo**

COURSE REGULATIONS

Participation

Class participation and attendance are important elements of every student's learning experience at The Hashemite University, and the student is expected to attend all classes. A student should not miss more than 15% of the classes during a semester. *Those exceeding this limit of 15% will receive a failing grade regardless of their performance*. It is a student's responsibility to monitor the frequency of their own absences. **Attendance record begins on the first day of class irrespective of the period allotted to drop/add and late registration. It is a student's responsibility to sign-in; failure to do so will result in a non-attendance being recorded.**

In exceptional cases, the student, with the instructor's prior permission, could be exempted from attending a class provided that the number of such occasions does not exceed the limit allowed by the University. The instructor will determine the acceptability of an absence for being absent. A student who misses more than 25% of classes and has a valid excuse for being absent will be allowed to withdraw from the course.

Plagiarism

Plagiarism is considered a serious academic offence and can result in your work losing marks or being failed. HU expects its students to adopt and abide by the highest standards of conduct in their interaction with their professors, peers, and the wider University community. As such, a student is expected not to engage in behaviours that compromise his/her own integrity as well as that of the Hashemite University.

Plagiarism includes the following examples, and it applies to all student assignments or submitted work:

- **Use of the work, ideas, images, or words of someone else without his/her permission or reference to them.**
- **Use of someone else's wording, name, phrase, sentence, paragraph, or essay without using quotation marks.**
- **Misrepresentation of the sources that were used.**

The instructor has the right to fail the coursework or deduct marks where plagiarism is detected

Late or Missed exams:

- In cases where a student misses an assessment on account of a medical reason or with prior permission; in line with university regulations an incomplete grade for the specific assessment will be awarded and an alternative assay assessment can be arranged.

Student Complaints Policy

Students at The Hashemite University have the right to pursue complaints related to faculty, staff, and other students. The nature of the complaints may be either academic or non-academic. For more information about the policy and processes related to this policy, you may refer to the students' handbook.

COURSE ASSESSMENT

Course Calendar and Assessment

Students will be graded through the following means of assessment and their final grade will be calculated from the forms of assessment as listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

Assessment	Grade Weighting	Deadline Assessment
Exam 1	50 %	8/2025
Final Exam	50 %	9/2025

Description of Exams

Test questions will predominately come from material presented in the lectures. Semester exams will be conducted during the regularly scheduled lecture period. Exam will consist of a combination of multiple- choice questions.

Make-up exams will be held for those who misses the exam, only for individuals who present official medical excuse. Only documented absences will be considered as per HU guidelines.

Homework: Will be given for each chapter, while the chapter in progress you are supposed to work on them continuously and submit in next lecture when I finish the chapter.

You are also expected to work on in-chapter examples, self-tests and representative number of ends of chapter problems. The answers of self-tests and end of chapter exercises are given at the end of the book.

Grades are not negotiable and are awarded according to the following criteria*:

Letter Grade	Description	Grade Points
A+	Excellent	4.00
A		3.75
A-		3.50
B+	Very Good	3.25
B		3.00
B-		2.75
C+	Good	2.50
C		2.25
C-		2.00
D+	Pass	1.75
D	Pass	1.50
F	Fail	0.00
I	Incomplete	-

WEEKLY LECTURE SCHEDULE AND CONTENT DISTRIBUTION

Note: For Intro. To public health **(111501209)** with 4 lecture periods per week (Sunday, Monday, Tuesday, Wednesday), one lecture period covers 75 minutes. The course content specifies lectures handouts that will be included in quizzes, homework and exams.

subject 1 Introduction to **Public** Health **Week 1** **6 lect hours**

Lectures 1- 6: *Introduction*

The concept of Public Health

1-What is Public Health

2- Aims and objectives Public Health

3- Components of community medicine

4-Identify the rule of community doctor

5- Components of Community Medicine:

- Epidemiology
- Vital statistics
- Demography
- School health
- Mental health
- Primary health care

- Maternal health and Child health
- Control of communicable diseases
- Control of non- communicable diseases
- Environmental health
- Occupational health
- Nutrition
- Health Service Administration
- Health Education

Subject 2 : Measures of population health **Week 2** **6 lecture h**

1-fertility indicators

A. The crude birth rate
B. The general fertility rates
C. The specific fertility rate

2-mortality indicators

A. The crude death rate
B. The cause-specific death rate
C. The sex specific death rate
D. The age-specific death rate
E. Case fatality rate

3-Morbidity indicators:

A. Incidence rate
B. Cumulative incidence rate
C. Prevalence rate

Subject 3: What is epidemiology? **Week 3** **6 lectures ho**

A. Recent developments in epidemiology
B. Definition, scope, and uses of epidemiology
C. Epidemiology and public health
D. Causation of disease, theories of disease causation
E. Natural history of disease
F. Health status of populations
G. Evaluating interventions
H. Achievements in epidemiology
    - Smallpox
    - Methyl mercury poisoning
    - Rheumatic fever and rheumatic heart disease
    - Iodine deficiency diseases
    - Tobacco use, asbestos, and lung cancer
    - Hip fractures
    - HIV/AIDS
    - SARS

Subject 4: ***Disease Occurrence***

A. *Descriptive epidemiology.*

- ❖ Characteristics of persons
  - Distribution of disease with age
  - Distribution of disease by marital status
  - Distribution of disease by sex
  - Distribution of disease by education and occupation
- ❖ Characteristics of a place
- ❖ Characteristics of time
  - Secular changes
  - Seasonal changes

B. *Analytical epidemiology*:

- Risk
- Risk factor
- Factors in causation

Subject 5: **The scope of prevention** **Week 4** **6 lecture hours**

Levels of prevention

- Primordial prevention
- Primary prevention - Population strategy
  - High-risk individual strategy
- Secondary prevention
  - Screening
  - Types of screening
  - Requirements for the success of the screening program
  - Validity of a screening test
- Tertiary prevention

Mid Exam

Subject 6: **Control of communicable diseases.** **Week 5 hours**

- Chain of infection:
  - Portal of entry
  - Modes of transmission
  - Portal of exit
- Epidemic Disease Occurrence
- Types of epidemics
  - Common source outbreak
  - Point Source outbreak.
  - Continuing Source outbreak

- Person-to-Person Spread, propagated outbreak.

- Investigation of an epidemic

Subject 7 ***P*****rimary health care** **Week 6** **6 lecture hours**

1- Concept of primary health care
2- Principle of primary care
3- Strategies for the delivery of primary health care
4- Component of primary health care

Maternal and Child Health (MCH)

- *Under five health services*
-

1- Services for children under five.
- Objectives of preventive, curative and follow up services for infants and preschool children
- Growth monitoring
- High risk babies and children

- ***Maternal services***

1- Antenatal care
2- Natal care
3- Postnatal care
4- Main maternal health problems
5- High risk pregnancy

- ***Family planning program***

1- Importance of family planning program
2- Basic program components
3- Essential activities for birth control services
5- Factors favoring use of contraceptive method

- **School health services:**

1- Services for school children.
2- Duties of school physician.

Subject 8: **Environmental health.** **Week 7** **4 lecture hours**

- Definition of environment, ecology.
- Types of environments.
- Importance of environmental sanitation.
- The problem of global warming.
- The principles of food sanitation.
- The steps of water sanitation.

• The concept of environmental risk assessment
Subject 9: **Disaster management.** **2 lecture hours**
• Public health response to disasters. • Types of disasters. • Emergency preparedness.
Week 8 • Final Exam