

The Hashemite University



الجامعة الهاشمية



Deanship of Academic Development
and International Outreach

عمادة التطوير الأكاديمي
والتواصل الدولي

Syllabus: Introduction to Public Health (111500209)

Summer Semester 2023 – /2024

| COURSE INFORMATION | |
|--|-------------------------------------|
| Course Name: Introduction to Public Health | Course Code: 111500209 |
| Semester: Summer Semester | Section: Preclinical course. |
| Department: Department of Basic Medical Sciences | Core Curriculum: MD program |
| Faculty: Faculty of Medicine | |
| Day(s) and Time(s): Sunday: 8:00-10.00 Tuesday: 8:00-10.00 Thursday: 8:00-10.00 | Credit Hours: 3 |
| Classroom: Alliance medical sciences theater | Prerequisites: None |
| COURSE DESCRIPTION | |
| <p>This course is an introductory course intended to introduce undergraduate students in a variety of disciplines to the basic items of public health. The subject will enable the students to acquire skills and develop an attitude towards the community as the focus of care utilizing the Primary Health Care approach and accept his responsibility for health promotion and disease prevention as part of the holistic approach to health care. The course will provide an introduction to community medicine, epidemiology, primary health care, mother, and child health (MCH) and health care system. The course will help the students to describe chain of infection of communicable diseases and describing epidemic patterns. Also, the course will enable the student to assess environmental risk, as well as the public health response of disaster management.</p> | |
| DELIVERY METHODS | |
| <p>The course will be delivered through a combination of active learning strategies. These will include:</p> <ul style="list-style-type: none">• 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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|--------------------------|--|
| Name | Dr Eman Adnan Al- Kamil |
| Academic Title: | Associate professor |
| Office Location: | 3 rd floor |
| Telephone Number: | 5568 |
| Email Address: | emana_sa@hu.edu.jo |
| Office Hours: | Sunday 11.00-1.00 Thursday 11.00-1.00 <i>Please send an e-mail (emana_sa@hu.edu.jo) to meet at any other time.</i> |

REFERENCES AND LEARNING RESOURCES

- 1- Community medicine : with recent advances /
Author: Suryakantha, AH.
Publication: Jaypee Brothers Medical Publishers, New Delhi : 2010.
Edition: 2nd ed.
- 2- Principles of community medicine /
Author: Rao, B. Sridhar.
Publication: A.I.T.B.S. Pub., Delhi : 2010
Edition: 5th ed.
- 3- Selected articles and handout documents on community medicine (will be available to students as electronic versions).

STUDENT LEARNING OUTCOMES MATRIX*

| Core Curriculum Learning Outcomes | Program Learning Outcomes | Course Objectives | Course Student Learning Outcomes | Assessment Method |
|--|--|---|---|--|
| <p>CC-LO-1 Think critically and creatively in a variety of methods in order to make decisions and solve problems.</p> | <p>PH -LO-1: Apply critical thinking and demonstrate problem-solving skills in two or more of the major fields of Public Health.</p> | <p>1. Develop an understanding of the basic principles of the major aspects of Public Health.</p> | <p>1. Understand the concept and meaning of Public Health. 2-Identify the aims and objectives of Public Health.</p> | <ul style="list-style-type: none"> • Exams • Quizzes • “On-line’ reading assignments • homework assignments |
| | | <p>2. Obtain a thorough foundation in the various fields of Public Health.</p> | <p>2. Describe Public Health development and achievements. 3. Identify the components of Public Health. 4. Identify the role of Public Health physician in the improvement of health.</p> | <ul style="list-style-type: none"> • Exams • Quizzes • “On-line’ reading assignments |
| | | <p>3. Learn to prevent health problems by different prevention methods.</p> | <p>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.</p> | <ul style="list-style-type: none"> • Exams • Quizzes • “On-line’ reading assignments • homework assignments |
| | | <p>4. Understand the measures of population health, fertility rates, mortality rates and morbidity rates.</p> | <p>4.1. Understand and calculate different rates, fertility rates, mortality rates and morbidity rates.</p> | <ul style="list-style-type: none"> • Exams • Quizzes • “On-line’ reading assignments • homework assignments. |
| <p>CC-LO-2. Communicate competently with others using oral and written English skills</p> <p>CC-LO-2. Demonstrate competency in the use of</p> | <p>PH-LO- 2: Use modern literature search methods to obtain information about Public Health topics and write reports.</p> | <p>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</p> | <p>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 service. 5.3. Describe the principles of primary health care. 5.4. identify the component of primary health care</p> | <ul style="list-style-type: none"> • “On-line” reading assignments |

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|--|---|--|--|--|
| <p>research skills and various information sources.</p> <p>CC-LO-4. Identify the general concepts of Public Health and its value in maternal and child health.</p> | | <p>of the health status of the population.</p> | <p>6.1. identify the different services available in the MCH centre for children under five.</p> <p>6.2. discuss the importance of maternal services, antenatal, natal and postnatal care.</p> <p>6.3. identify the main maternal health problems.</p> <p>6.4. identify high risk pregnancy.</p> <p>6.5. Discuss the importance of family planning program</p> <p>6.6. recognize the essential activities for birth control services.</p> <p>6.7. discuss the importance of School health services and identify the most important school health services.</p> | |
| | <p>PH-LO-3: Communicate results to Public Health and maternal and child health.</p> <p>PH-LO-4: The course will shed the lights on the implications of studying role of Public health in disease prevention by vaccination.</p> | <p>7. Acquire positive attitudes towards further studies in Public Health and towards the application of public Health in other disciplines.</p> <p>7. identify the schedule of EPI.</p> | <p>7.1. Develop a positive attitude towards Public Health and its applications in society, and towards further study and lifelong learning.</p> <p>7.2. discuss the important of Vaccination.</p> <p>7.3. Develop a positive attitude towards vaccination and its applications in society and explain its role in prevention of communicable diseases.</p> <p>7.2. identify the different contraindication to vaccinations.</p> | <p>On-line' reading assignments Home-work assignments.</p> |
| <p>CC -LO-5: Identify the general concepts of</p> | <p>PH- LO- 5: The course will shed the lights on the implications of</p> | <p>8. identify the chain of infection and its role in the</p> | <p>8.1. identify portal of entry.</p> <p>8.2. identify modes of transmission.</p> | <ul style="list-style-type: none"> On-line' reading assignments |

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|--|--|--|--|--|
| Public Health and its value in the control of communicable diseases. | studying role of public health in the control and prevention of communicable diseases. | detection of infections. | 8.3. identify portal of exist. 8.4. Epidemic Disease Occurrence, and epidemic patterns. 8.5. Determine and investigate an epidemic with steps. | 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. | <ul style="list-style-type: none"> • “On-line’ reading assignments • homework assignments. |
| CC-LO-7: Identify public health response to disaster management. | 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. | <ul style="list-style-type: none"> • “On-line’ reading assignments • homework assignments. |

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 Need section will exert all efforts to accommodate for individual’s needs.

Special Needs Section: Student Services and Care Unit

Tel: 053903333 ext. 4132 / 4583 / 5023

Location: Deanship of Students 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 essay 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 % | 8/2024 |
| Final Exam | 50 % | 9/2024 |

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 miss 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 Health Economics (111500101) with 2 lecture periods per week (Monday /Wednesday), one lecture period covers (50 minutes). The course content specifies lectures handouts that will be included in quizzes, homework and exams.

| <u>subject 1</u> | Introduction to Public Health | <u>Week 1</u> | <u>6 lectures hours</u> |
|--|--------------------------------------|---------------|-------------------------|
| Lectures 1- 6: Introduction <i>The concept of Public Health</i> 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: <ul style="list-style-type: none">● 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● Heath Service Administration● Health Education | | | |
| <u>Subject 2 :</u> | Measures of population health | <u>Week 2</u> | <u>6 lecture hours</u> |
| 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 hours

A. Recent developments in epidemiology

B. Definition, scope, and uses of epidemiology

C. Epidemiology and public health

D. Causation of disease

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 with marital status
 - Distribution of disease with sex
 - Distribution of disease with education and occupation
- ❖ Characteristics of 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 screening program
 - Validity of a screening test
- Tertiary prevention

Mid Exam

Subject 6: Control of communicable diseases.

Week 5

6 lecture 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 Primary 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

4- 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.

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2 lecture hours

- Public health response to disasters.
- Types of disasters.
- Emergency preparedness.

Week 8

- Final Exam