



مركز الاعتماد
وإضمان الجودة
ACCREDITATION & QUALITY ASSURANCE CENTER



The University of Jordan
Accreditation & Quality Assurance Center

Course Syllabus

Community Medicine
Epidemiology and Biostatistics
0535502



1	Course title	Community Medicine Epidemiology and Biostatistics
2	Course number	0535502
3	Credit hours (theory, practical)	3 credit hours Theory
	Contact hours (theory, practical)	48 hours
4	Prerequisites/corequisites	None
5	Program title	
6	Program code	
7	Awarding institution	
8	Faculty	Medicine
9	Department	Family and Community Medicine
10	Level of course	3rd year Dental students
11	Year of study and semester (s)	Second Semester
12	Final Qualification	
13	Other department (s) involved in teaching the course	School of Nursing
14	Language of Instruction	English
15	Date of production/revision	February 2023

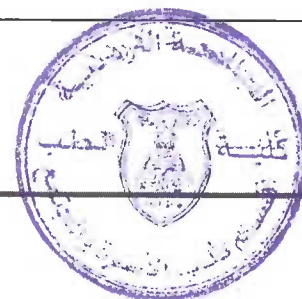
16. Course Coordinator:

Dr. Rania Albsoul
 Department of Family and Community Medicine, School of Medicine
 Email: r.absoul@ju.edu.jo
 Contact hours: Available by appointment

17. Other instructors:

Dr. Sireen Alkhaldi
 Department of Family and Community Medicine, School of Medicine
 Email: s.alkhaldi@ju.edu.jo
 Contact hours:

Dr. Diana Arabiat, School of Nursing
 Email: d.arabiat@ju.edu.jo
 Contact hours:
 Sunday 9:30 am – 10:30 am
 Tuesday 1:00 pm – 2:00 pm



18. Course Description:

This course is designed to deliver knowledge of principles and practice of prevention in primary health care for dental students. This course highlights important community health domains such as mother and child health, environmental and occupational health, in addition to demography. It also provides students with core skills in epidemiology and biostatistics essential for medical research.

19. Course aims and outcomes:

A- Aims: To provide students with core skills in Community medicine, epidemiology and biostatistics.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...

Intended Learning outcomes (ILOs): By the end of the course, a student should be able to:

A. Community Medicine

By the end of the **Community Medicine** lectures, students should be able to:

1. Define the concept of Primary Health Care (PHC)
2. Describe elements of PHC Principles/ Characters/ services and activities.
3. Identify Common causes of death globally and in Jordan.
4. Introduce approaches to health education
5. Understand the importance and role of MCH care
6. Outline the objectives of the MCH programs\
7. Recognize the available maternal and child health services
8. Identify the main elements of antenatal care.
9. Describe major health problems of mothers and children
10. Identify the factors that affect the health of mothers and children
11. Identify the basics of health management and motivation theories.
12. Discuss demographic processes, population dynamics, and sources of population data.

B. Epidemiology

By the end of the **Epidemiology** lectures, students should be able to:

1. Identify and interpret the components of the definition of Epidemiology.
2. Describe the contribution of epidemiology to science and discuss the importance of epidemiology as a research discipline.
3. Demonstrate an understanding of the basic tenets of epidemiology.
4. Explain the ultimate aims of, and the scope of epidemiology
5. Summarize the key milestones in the history of epidemiology.
6. Identify the theories of disease causation.
7. Estimate, apply, and interpret correctly epidemiological measures of disease frequency Including incidence and prevalence.
8. Describe the main features of some principal epidemiological study designs (including cross-sectional, case-control, cohort study designs and their use
9. Select an appropriate study design to address specific epidemiological Questions
10. Explain strengths and weaknesses of common epidemiological study designs

C. Biostatistics

By the end of the **Biostatistics** lectures, students should be able to:

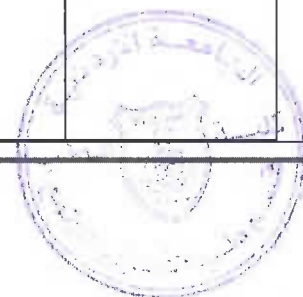
1. Identify whether the hypothesis of a paper is concerned with the efficacy of intervention, causality, test



- accuracy or determining the magnitude of the health problem.
2. Identify which study type has been used, and judge how this affects the interpretation of the results.
 3. Calculate and interpret measures of disease frequency and measures of association.
 4. Identify and assess the implications of the main types of bias
 5. Evaluate screening tests and interpreting their use in different populations.
 6. Assess infectious disease outbreaks.
 7. Be able to identify and interpret key sources of population health data.
 8. Summarize statistical data using tables, graphs and appropriate summary statistics.
 9. Interpret significance tests and confidence intervals and other measures of associations.
 10. Compare two samples using the *t* test for continuous variables and the chi-squared test for categorical data, in both paired and unpaired cases.
 11. Compare two samples using non-parametric tests, in both paired and unpaired cases.
 12. Calculate the sample size required for simple studies.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Primary Health Care (PHC)	1 Introduction to PHC Elements and requirements of PHC Health education	Dr. Rania Albsoul	1A 2A 3A,4A		PowerPoint presentation
Maternal and child health (MCH)	2 Objectives of MCH Maternal and Child Health Services Antenatal care	Dr. Rania Albsoul	5A, 6A 6A 8A		PowerPoint presentation
Maternal and child health Demography	3 Maternal morbidity and mortality Infant and child health+ Adolescence	Dr. Rania Albsoul	9A, 10A 9A,10A		PowerPoint presentation



Health Care Management	4 Introduction to healthcare management	Dr. Rania Albsoul	11A		PowerPoint presentation
	Motivation and management		11A		
Demography	Introduction to demography		12A		
Epidemiology	5 Introduction and History of Epidemiology	Dr. Sireen Alkhalidi	1B, 2B, 3B		
	Disease causation and Natural History of Disease		4B		
Epidemiology	6 Incidence and Prevalence	Dr. Sireen Alkhalidi	5B		
	Epidemiological Study Designs		6B, 7B, 8B		
	Bias and Confounding		9B		
Epidemiology	7 Measures of Association	Dr. Sireen Alkhalidi	11B		
	Association and Causation		11B		
	Screening		10B		
8 (Midterm Exam)					
Environmental and occupational health	9	Dr. Sireen Alkhalidi			
Biostatistics	10 Introduction to Biostatistics	Dr. Diana Arabiat	1C 4C		PowerPoint presentation
Biostatistics	11 Descriptive Statistics	Dr. Diana Arabiat	3C 5C 6C 7C		PowerPoint presentation Video/ SPSS
Biostatistics	12 Probability	Dr. Diana Arabiat	1C 8C		PowerPoint presentation
Biostatistics	13 Inferential Statistics	Dr. Diana Arabiat	1C 4C 9C 10C		PowerPoint presentation Video/ SPSS
Revision	14				

Revision	15				

Lecture Schedule:

Day	Date	Subject	Lecturer
Sun	26/2/2023	Primary Health Care	Dr. Rania
Mon			
Tues			
Wed			
Thurs			
Sun	5/3/2023	Maternal and Child Health	Dr. Rania
Mon			
Tues			
Wed			
Thurs			
Sun	12/3/2023	Maternal and Child Health	Dr. Rania
Mon			
Tues			
Wed			
Thurs			
Sun	19/3/2023	Health Care Management and demography	Dr. Rania
Mon			
Tues			
Wed			
Thurs			
Sun	26/3/2023	Epidemiology	Dr. Sireen
Mon			
Tues			
Wed			
Thurs			
Sun	2/4/2023	Epidemiology	Dr. Sireen
Mon			
Tues			
Wed			
Thurs			
Sun	9/4/2023	Epidemiology	Dr. Sireen
Mon			
Tues			
Wed			
Thurs			
Sun	16/4/2023	Midterm Exam	Dr. Rania
Mon			
Tues			
Wed			
Thurs			
Sun	23/4/2023		
Mon			

Tues		Environmental and occupational health	Dr. Sireen
Wed			
Thurs			
Sun	30/ 4/ 2023	Biostatistics	Dr. Diana
Mon			
Tues			
Wed			
Thurs			
Sun	7/ 4/ 2023	Biostatistics	Dr. Diana
Mon			
Tues			
Wed			
Thurs			
Sun	14/ 4/ 2023	Biostatistics	Dr. Diana
Mon			
Tues			
Wed			
Thurs			
Sun	21/ 4/ 2023	Biostatistics	Dr. Diana
Mon			
Tues			
Wed			
Thurs			
Sun	28/ 4/ 2023	Revision	Dr. Sireen Dr. Diana Dr. Rania
Mon			
Tues			
Wed			
Thurs			
Sun	4/ 5/ 2023	Revision	Dr. Sireen Dr. Diana Dr. Rania
Mon			
Tues			
Wed			
Thurs			
Final Exam			

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

1. Face-to-face lectures
2. Power Point with voice recording, uploaded on e-learning.

22. Evaluation Methods and Course Requirements:

Each student must recognize that he/she bears the primary responsibility for his/her education. Classroom participation provides an opportunity to both refine your thinking and to practice expressing your ideas. Students are expected to prepare for lectures by reading the assigned materials and reviewing relevant materials. It is assumed that students will have read and thought about assigned materials before class. That is, you should at least have skimmed through them even if you don't understand them. Having documents for the session will be very helpful in following along with the material that is taught in the course. An internet access is highly encouraged.

Students are expected to attend all classes and ask questions as necessary. Successful learning in this course depends upon regular reading, studying, and class attendance. Absenteeism and missing



sessions may hurt you significantly if you do not keep pacing with the course materials.

The discussions will be utilized in this course extensively. A constructive contribution helps to move the discussion forward. NONE will be penalized for floating an idea that others debunk. I encourage you to think critically, to challenge your classmates without showing disrespect, and to put forward your own ideas for consideration by others.

Students are encouraged to seek faculty assistance when they are having difficulty with content or with a specific skill. Seek help early. Don't wait until you are too deeply in trouble to bail yourself out. Office hours are listed above and I am also available only in appointments. Just because you can doesn't mean you should, invest your braining. Students are encouraged to talk with faculty on an individual basis if they want to explore specific content in more depth than is possible in class.

Opportunities to demonstrate achievement of the ILOs are provided through the following **assessment methods and requirements**:

Midterm exam 40%

Final 60%

23. Course Policies:

A- Attendance policies:

Attendance is expected. Arrival on time is expected. Students who miss more than eight class sessions with or without excuse will be able to sit for the final exam. (See the university policies regarding absence).

B- Absences from exams and handing in assignments on time:

Students unable to take a scheduled exam are expected to inform the instructor within 3 days and make arrangements for a make-up one. Make ups will be given only to students who have notified the instructor and set up an alternate time. Any missed exam will result in a grade of zero for that particular examination type.

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

E- Grading policy:

F- Available university services that support achievement in the course:

24. Required equipment:

None

25 References:



A- Required book(s), assigned reading and audio-visuals:

PowerPoint presentations provided by the instructors and uploaded on the eLearning.

B- Recommended books, materials, and media:

Rahim, A. (2017). *Principles and practice of community medicine*. Jaypee Brothers Medical.

Bhalwar, R. (2019). *Textbook of community medicine*. Wolters kluwer india Pvt Ltd

Epidemiology for Public Health Practice, Robert H. Friis and Thomas A. Sellers. Fifth edition, 2013, Jones and Bartlett.

26. Additional information:

None

Name of Course Coordinator: -Dr. Rania Albsoul -----Signature: ----- Date: --26-2-

2023----- Head of curriculum committee/Department: - ----- Signature: -----

Head of Department: - Dr. Sireen Alkhaldi ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

Head of Department

Assistant Dean for Quality Assurance

Course File

