هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

Course Specification
▬ (Bachelor)

Course Title: Epidemiology	
Course Code: 473NUR-2	
Program: Nursing	
Department: Nursing	
College: Nursing and health sciences	
Institution: Jazan University	
Version: 2025	
Last Revision Date: 11 December 2024	

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: (2)

2. Course type

A.	□ University	□ College	□ Department	□ Track	☒ Others
B.	☒ Required		□Elective		

3. Level/year at which this course is offered: (5ᵗʰ level/4ᵗʰ year)

4. Course general Description:

This course is required for all undergraduate nursing students to introduce the basic concepts of epidemiology and basic methods as applied to public health problems. Emphasis is placed on the principles and methods of epidemiologic investigation, displays of survey/surveillance data, and the use of epidemiological investigations to describe the disease in populations. This course explores various epidemiologic study designs for investigating the associations between risk factors and various disease outcomes and culminating with criteria for causal inferences. By epidemiological concepts students will understand the practice and importance of epidemiological investigation in the areas of health services, environment and public health policies.

5. Pre-requirements for this course (if any):

None

6. Co-requisites for this course (if any):

None

7. Course Main Objective(s):

At the end of this course the student will be able to:

1. Understand the dynamic of disease epidemiology.
2. Discuss the sources of epidemiological data.
3. Understand the different methods in epidemiology to control and prevent occurrence of disease.
4. Develop basic concepts and application of Epidemiology in the field of Nursing.

5.   Have analytical skills to collect, collate, analyze and interpret data and convert it into a piece of intelligence for necessary public health action.

6.   Investigate an epidemic and carryout need assessment and program implementation in the community setting.

7.   Design and execute simple research activities and surveys.

8.   Join the different levels of public health work force.

9.   Apply basic understanding of epidemiology to be able to pursue further studies and achieve academic excellence

10.   Developing a graduate who is aware about the potential emerging, re-emerging & threatening disease.

11.   Prepare a community – oriented nurses capable of implementing preventive and control measures for communicable diseases on the individual, family and community levels and within the primary health care settings following WHO policies and protocols.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2x15=30	100%
2	E-learning		
3	Hybrid ● Traditional classroom ● E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	15x2=30
2.	**Laboratory/Studio**	
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		30

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Discuss the broad understanding of the principal theories, concepts, and terminology in the field of epidemiology	K1	1. Group Discussion 2. Cooperative learning 3. Brainstorming 4. Case-Based Learning 5. Problem-based learning.	**Direct:** 1. MCQs. **Indirect:** 1. Course evaluation survey 2. ILO
1.2	Discuss the principles and concepts of appropriate nursing care that are tailored to diverse population based on epidemiological data	K2		
2.0	**Skills**			
2.1	Utilize epidemiological data to implement effective nursing interventions.	S1	1. Group Discussion 2. Cooperative learning 3. Brainstorming 4. Case-Based Learning 5. Problem-based learning.	**Direct:** 1. Oral Presentation 2. MCQs **Indirect:** 1. Course evaluation survey 2. ILO
2.2	Calculate commonly used health measures, such as relative risk, attributable risk, and odds ratio.	S2		
2.3	Design and propose epidemiological studies and research.	S3		
2.4	Critically evaluate epidemiological studies and research findings to inform evidence-based nursing practice.	S5		
3.0	**Values, autonomy, and responsibility**			
3.1	Comply with professional and academic values, standards and ethical code for nursing practice.	V1	1. Group Discussion 2. Cooperative learning 3. Brainstorming	**Direct:** 1. Oral Presentation 2. MCQs **Indirect:**

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
3.2	Display teamwork, management and leadership skills for professional development.	V2	4. Case-Based Learning 5. Problem-based learning.	1. Course evaluation survey 2. ILO

C. Course Content

No	List of Topics	Contact Hours
1.	**Foundation of Epidemiology** Introduction and definition, Determinants of health Objective and scope of epidemiology	**2**
2.	**Foundation of Epidemiology** Level and approaches of prevention for occurrence of diseases Epidemiology in clinical practice	**2**
3.	**Disease Concepts in Epidemiology** Natural history of disease Epidemiological triad Modes of disease transmission Portal of entry, Chain of infection	**2**
4.	**Disease Concepts in Epidemiology** Classification and spread of diseases Disease outbreak Precautions and types of control for communicable diseases	**2**
5.	**Descriptive Epidemiology** Measuring of disease occurrence and frequency Measures of morbidity and mortality Measuring of disease occurrence and frequency	**2**
6.	**Clinical Epidemiology** Survey & surveillance Screening Evaluating the screening test	**2**
7.	**Causation and Association in Epidemiology** Relationship of exposure and outcome Causal interference and association Causal relationships, Factors and hierarchy of causes	**2**
8.	**Causation and Association in Epidemiology** Causal interference, Steps and study design for judging causality	**2**
9.	**Design Strategies and Statistical Methods in Analytic Epidemiology-I** Experimental study designs Cross sectional Ecological study design	**2**

10.	**Design Strategies and Statistical Methods in Analytic Epidemiology-II** Cohort studies Relative risk and p value Case-Control studies Odds ratio	2
11.	**Emerging and re-emerging diseases**	2
12.	**Epidemiological presentation**	6
13.	**Revision**	2
Total		**30**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Discipline & Behavior	Week 1-15	5%
2.	Mini project	Week 5	10%
3.	Midterm Exam	Week 8-9	30%
4.	Oral Presentation	Week 10	5%
5.	FINAL EXAMINATION	Week 17-20	50%
...	**Total**		**100%**

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Celentano, D. &Moyses, S. (2019). Gordis Epidemiology. Elsevier.
Supportive References	• Gordis, L. (2014). Epidemiology 5th edition. Elsevier Saunders. • Giesecke Johan. Modern Infectious Disease Epidemiology 2002, 2nd edition Oxford University Press • Gorbach SL, Bartlett JG, and Blacklow NR, editors. Infectious Diseases, 3rd edition. • Control of Communicable Disease Manual. 2008, 19th ed. • American Public Health Association – • Magnus M. Essentials in Infectious Disease Epidemiology. Jones and Bartlett Publishers 2008. – • Jones and Bartlett Publishers 2008. – Principles of Epidemiology in Public Health Practice: An Introduction to Applied Epidemiology and Biostatistics (3rd edition). Atlanta, GA. Thomas JC

	and Weber DJ. Epidemiologic Methods for the Study of Infectious Diseases. Oxford University Press 2001.
Electronic Materials	National Institute of Allergy and Infectious Diseases (http://www3.niaid.nih.gov/) - Centers for Disease Control and Prevention (http://www.cdc.gov/) - World Health Organization (http://www.who.int/en/) - The National Library of Medicine: http://www.ncbi.nlm.nih.gov/sites/entrez - ERIC - The Journal of Infectious Diseases (http://www.journals.uchicago.edu/JID/home.html) - Clinical Infectious Diseases (http://www.journals.uchicago.edu/CID/home.html) - Emerging Infectious Diseases (http://www.cdc.gov/ncidod/eid/) - Morbidity & Mortality Weekly Report (http://www.cdc.gov/mmwr/)
Other Learning Materials	Lecture notes • Computer programs for Epidemiologists. • - archive.biomedcentral.com/17425573/content/1/1/6 • - Statistical software for Epidemiology • - statpages.org/javasta2.html – • CDC Epidemiologic Case Studies – (Computer Based) www.cdc.gov/epicasestudies/download_computer.html

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Lecture room
Technology equipment (projector, smart board, software)	Internet data show& Smart Board
Other equipment (depending on the nature of the specialty)	Video recording apparatus and facility Smart board

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Course Report Students' teaching evaluation questionnaire. Continuing feedback from students during the semester.
Effectiveness of Students assessment	Instructor	Course report CLO Evaluation survey Continuing feedback from students during the semester.
Quality of learning resources	Quality Assurance Unit	Students Satisfaction Survey Continuing feedback from students during the semester.
The extent to which CLOs have been achieved	Instructor	Course report CLO Evaluation survey

Assessment Areas/Issues	Assessor	Assessment Methods
		Continuing feedback from students during the semester.
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Nursing Department Council
REFERENCE NO.	NUR 2508
DATE	Jan 15, 2025