
	UNIVERSITY OF BANJA LUKA FACULTY OF MEDICINE			
	UNDERGRADUATE STUDIES			
	Study Programme of	MEDICINE		
Course Unit Name	Epidemiology			
Type of Course Unit	General Education			
Course Unit Code	Course Unit Status	Semester	Class Workload	Number of ECTS
	COMPULSORY	V	2L+1P	3
Members of Staff	Janja Bojanić, full professor, Nina Rodić-Vukmir, assistant professor, Jela Aćimović, senior teaching assistant, Jelena Dević-Đaković, associate			
Eligibility Requirements				Form of Requirements
Course units from the previous year of study must be passed.				As provided by the Rules of the First-Cycle Studies
Goals of the Course Unit				
Adoption of current theoretical knowledge and practical skills in general epidemiology, health promotion, disease prevention, planning and implementation of preventive and counter-epidemic measures of checking and suppressing infectious and mass non-infectious diseases. Adoption and development of communication knowledge and skills in contact with the patients and their family members, colleagues and medical staff, protection and promotion of patient rights. Formation of a broad knowledge base in the students and stimulating research and innovation, as well as student involvement in projects and preparation for future systematic way of thinking and a structured approach to medical issues during their education.				
Learning Outcomes (knowledge acquired):				
<ol style="list-style-type: none"> 1. Collection, analysis and interpretation of data on health disorders of different etiology 2. Design of fundamental epidemiological studies 3. Application of epidemiological methods in the promotion and prevention of infectious and mass non-infectious diseases 4. Epidemics research 5. Planning and implementing necessary preventive and counter-epidemic measures in checking and suppressing infectious and mass non-infectious diseases 				
Contents of the Course Unit:				
<ol style="list-style-type: none"> 1. Study subject and significance of epidemiology. Epidemiology in the practice of public health. New directions of development in epidemiology. 2. Health disorder frequency indicators. Data sources in epidemiology. 3. Causality in epidemiology and the concept of risk. Epidemiological triage 4. Types of epidemiology studies. Descriptive epidemiology and descriptive studies. 5. Analytical studies. Experimental studies. 6. Measurement errors in epidemiology studies. Public health supervision. 7. Prevention. Screening. 8. Reservoir and source of infection. Portals of entry and exit of infection. 9. Routes of transmission of infectious diseases. Epidemiology of the living environment. 10. Immunization. Epidemics research. 11. Disease suppression measures. Hospital-Acquired Infections. 12. Epidemiology in emergency situations. Biological war and terrorism. Communication, knowledge, skill and practice. 13. Epidemiology of chronic non-infectious disease and strategies for their prevention. 14. Epidemiology of cardiovascular diseases. 15. Epidemiology of malignant tumours. Epidemiology of chronic respiratory diseases. 16. Application of epidemiology in evidence-based medicine. Clinical epidemiology. 				

Practicals

1. Health disorder frequency indicators.
2. Standardization.
3. Causality in epidemiology and the concept of risk.
4. Natural flow of disease.
5. Disposition and collective immunity.
6. John Snow and cholera (descriptive method).
7. Smoking and lung cancer (case study and control).
8. Smoking and lung cancer (cohort study).
9. Field experiment.
10. Immunization (active).
11. Immunization (passive).

Teaching Methods:

Lectures, practicals, midterm

Literature:

Celentano, D.D., Szklo, M. and Farag, Y., 2024. *Gordis Epidemiology*. 7th ed. Philadelphia: Elsevier.

Examination Form:

Pre-Exam Duties		Final Exam		Total Points
Attendance	5	Oral / Written		100
Attendance to practicals	5	Exam / Written exam / test	50	
Midterm	40			

Note for the Course Unit:

The number of points in the Final Exam must be at least 31. The final grade is formed with the following formula:

Attendance to lectures/practicals + midterm + more than half of the points from the Final Exam.

Syllabus Designer: Prof. Dr Janja Bojanić