



CD 8.5.1 DISCIPLINE SYLLABUS FOR  
UNIVERSITY STUDIES

Edition: 09

Date: 08.09.2021

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FACULTY OF MEDICINE  
STUDY PROGRAM 0912.1 MEDICINE  
DEPARTMENT OF PREVENTIVE MEDICINE

APPROVED

at the meeting of the Commission for Quality Assurance and Evaluation of the Curriculum faculty Medicine 2

Minutes No. 1 of 16.09.21

Chairman dr. hab.șt. med, assoc. profesor

Suman Serghei

(signature)

APPROVED

at the Council meeting of the Faculty Medicine 2

Minutes No. 1 of 21.09.21

Dean of Faculty PhD, assoc. professor

Mircea Bețiu

(signature)

APPROVED

approved at the meeting of the chair epidemiology discipline

Minutes No. 2 of 13.09.2021

Head of discipline PhD, assoc. professor

Angela Paraschiv

(signature)

## SYLLABUS

### DISCIPLINE EPIDEMIOLOGY

#### Integrated studies

Type of course: **Compulsory**

Syllabus developed by the team of authors:

Angela Paraschiv, PhD, associate professor

Ion Berdeu, PhD, associate professor

Chisinau, 2021



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### I. INTRODUCTION

- **General presentation of the discipline: place and role of the discipline in the formation of the specific competences of the professional / specialty training program**

Within the Epidemiology discipline, students have the opportunity to integrate the theoretical and practical knowledge (by simulation activities) on infectious and noninfectious morbidity of the population in everyday practice.

Epidemiology is a compulsory discipline, the study of which at the university stage allows the future doctors to learn the laws of formation and development of infectious and noninfectious morbidity in population, at the same time, they are able to apply the preventive and anti-epidemic measures to prevent and stop the morbidity in medical practice. During this discipline, together with the study of epidemiological features and measures for the prevention of infectious and non-infectious diseases, future specialist acquires practical skills for early detection of communicable and non-communicable diseases and the application of preventive and anti-epidemic measures. At the same time, during epidemiology classes, students develop capabilities to assess and solve clinical problems related to the causes of illnesses, correct and early diagnosis of the cases, prognosis of the disease and prevention of its evolution. This module helps students to identify valid clinical data, on the basis of which they are able to take the most rational (optional) medical decisions in practice.

#### **Mission of the curriculum (aim) in professional training**

The formation of knowledge and practical skills for future doctors in general, and special epidemiology, organization and implementation of prophylactic and anti-epidemic measures

- Language of the course: English;
- Beneficiaries: students of the IV-year, faculty of Medicine.

### II. MANAGEMENT OF THE DISCIPLINE

Code of discipline	S.08.O.071		
Name of the discipline	Epidemiology		
Person in charge of the discipline	Paraschiv Angela		
Year	IV	Semester	7
Total number of hours, including:			90
Lectures	16	Practical/laboratory hours	16
Seminars	16	Self-training	42
Form of assessment	E	Number of credits	3

### III. TRAINING AIMS WITHIN THE DISCIPLINE

Within the discipline of epidemiology, students from the Faculty of Medicine will have the opportunity to integrate theoretical and practical knowledge (through simulation activities) on infectious and noninfectious morbidity of the population in everyday practice.

*At the end of the discipline study the student will be able to:*

- **at the level of knowledge and understanding:**
  - have theoretical knowledge of contemporary epidemiology;
  - know the structure, mechanism of development and manifestations of infectious and non-infectious morbidity;



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- know the features of different epidemiological and nosological forms and non-communicable diseases groups;
  - know risk factors which determine the morbidity of population;
  - know the methods, statistical procedures and interpretation of the epidemiological investigation, epidemiological diagnosis;
  - know about the system of anti-epidemic and prevention measures;
  - know the methods and means of prevention and control of diseases, including examination of infectious and invasive outbreaks, criteria of evaluation;
  - know the principles of epidemiological surveillance of public health;
  - know the duties of medical doctor and epidemiologist in organizing and carrying out the preventive and anti-epidemic measures.
  - know how to investigate and apply epidemiological methods and interpretation of results in the study;
  - know epidemiological and clinical research methods and their application in medical practice.
  - know about assessment methods of diagnosis and treatment in medical practice.
- **at the application level:**
- collect the epidemiological information and estimate the risk factors in triggering the epidemic and infectious process;
  - operate with the statistical methods of operative and retrospective epidemiological analysis, to draw informative tables and graphs;
  - carry out the epidemiological investigation of the epidemic outbreak, with the development of the appropriate antiepidemic measures;
  - address, from an epidemiological point of view, the causality theory from effect to cause, and from cause to effect;
  - apply epidemiology concepts and principles in case of occurrence or risk of an epidemic spread of infectious diseases, including conventional extremely dangerous, as well as in public health emergencies (calamities, bioterrorism, etc.);
  - apply standard and additional precautions in the prevention of nosocomial infections;
  - assess the efficacy of antiepidemic and prophylactic measures;
  - take measures to isolate sources of pathogens in contagious diseases;
  - take prophylactic disinfection measures in outbreaks of infectious diseases;
  - organize the immunoprophylaxis of the population in infectious diseases and to select tests for the assessment of effectiveness of the planned vaccinations and those carried out according to epidemiological indications;
  - organize work of health education of the population in infectious diseases prevention;
  - determine the main directions of epidemiological surveillance of public health;
  - carry out epidemiological studies: descriptive, analytical, experimental (controlled, uncontrolled), meta-analysis;
  - assess the results of the laboratory investigations and correlate them with the results of clinical and epidemiological investigations in order to formulate a correct epidemiological diagnosis;
  - assess the efficacy and efficiency of the methods and means of diagnosis and treatment in clinical practice.
- **at the integration level:**
- use epidemiological, microbiological, clinical and hygiene studies to estimate the causes, conditions and mechanism of formation of communicable and non-communicable diseases, prevention and control.
  - use epidemiological anamnesis in clinical diagnosis of infectious and invasive diseases.



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- realize the importance of early clinical diagnosis and qualitative treatment of infectious diseases, as a premise to perform epidemiological measures (early isolation carrier, prophylaxis of chronic forms, effective disinfection or disinsection, etc.).
- use all knowledge as epidemiologists, microbiologists, infectionists, hygienists, family doctors, physicians, surgeons, health managers in prevention and control of communicable and noncommunicable diseases.
- use all knowledge - epidemiological, immunological and clinical in order to perform efficient immunoprophylaxis.
- effectively use epidemiological methods of investigation (retrospective and operative epidemiological analysis) by primary care specialists.
- know all duties in controlling the diseases both epidemiologists and clinical doctors, and to respect the ethics of epidemiological activities in the investigation and in performing the prevention and control measures.
- use the results of laboratory investigations and correlation with results of clinical and epidemiological investigations in order to develop an effective treatment.

#### IV. PROVISIONAL TERMS AND CONDITIONS

Epidemiology is a compulsory subject, which trains future doctors at the university level in the features of development and courses of infectious and non-infectious morbidity in the population. At the same time, students are able to apply the control measures in clinical practice, necessary to stop the spreading of the morbidity. Within this discipline, future specialist gains practical skills to investigate outbreaks and assess the effectiveness of performed measures in the focus. At the same time, within hours of clinical epidemiology, the student develops skills to assess and solve clinical problems related to the causes of illnesses, correct and early diagnosis of the cases and the prognostication of the pre nosologic forms of the disease and knowing the effectiveness of treatment in disease evolution. This module helps students identify valid clinical data based on which they are able to take the most rational (optional) medical decisions in the practical work of patient assistance.

##### **Student of the IV-year requires the following:**

- knowledge of the language of instruction;
- basic skills in microbiology, immunology and hygiene;
- digital skills (use of the internet, document processing, electronic tables and presentations, use of graphics software);
- communication skills and teamwork;
- qualities - tolerance, compassion, autonomy.

#### V. THEMES AND ESTIMATE ALLOCATION OF HOURS

##### *Lectures, practical hours/ laboratory hours/seminars and self-training*

No.	THEME	Number of hours		
		Lectures	Practical hours	Self-training
1.	Definition of epidemiology. The place and role of epidemiology in science and medical practice. The epidemic process. Theoretical basis of the study of epidemic process. The structure, factors, mechanism of development and manifestations of the epidemic process.	2		
2.	Epidemic process. Structure, factors and mechanism of development		4	5



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No.	THEME	Number of hours		
		Lectures	Practical hours	Self-training
	of the epidemic process. Manifestations of epidemic process. Epidemic curves in the spreading of communicable diseases.			
3.	The system of anti-epidemic measures. Epidemiological measures directed to the source of pathogens, mechanism of transmission and receptivity (Immunoprophylaxis). Sterilization, disinfection and disinsection.	2		
4.	Anti-epidemic measures directed to the source of pathogens and mechanism of transmission.		4	5
5.	Epidemiology of digestive infections. Preventive and control measures.	2		
6.	Immunoprophylaxis. Types and principles of obtaining the vaccines and others bio-preparations. Requirements for storage and transportation of biological products. Methods and means of administration. Adverse events appeared after the vaccination. Indications and contraindications to perform immunoprophylaxis. National Program of Immunization. The vaccination schedule. The role of the physician and epidemiologist in the planning, implementation and monitoring of immunoprophylaxis. The evaluation of the effectiveness of immunoprophylaxis.		4	5
7.	Epidemiology of respiratory infections. Preventive and control measures.	2		
8.	Epidemiology of digestive infections (typhoid fever, shigellosis, salmonellosis, food poisons, viral hepatitis with fecal-oral mechanism of transmission). Preventive and control measures.		4	5
9.	Epidemiology of blood-borne infections. Preventive and anti-epidemic measures.	2		
10.	Epidemiology of respiratory infections (diphtheria, measles, scarlet fever, mumps, influenza). Epidemiological investigation in outbreak of respiratory infections. Preventive and control measures.		4	5
11.	Clinical epidemiology. Definition. Purpose and objectives. Structure and content of clinical epidemiology. Pharmacoepidemiology. Infections associated with healthcare (HCAI). Program of prevention and control of HCAI.	2		
12.	Organization and carrying out of anti-epidemic measures in infections transmitted by blood (hepatitis B, C, HIV/AIDS). Infections transmitted by vectors (epidemic typhus, malaria). Preventive and control measures. Healthcare associated infections (HCAI). Key-elements of the Program of prevention and control of infections.		4	5
13.	Public health emergencies. Infections with potential for spread. Preventive and control measures.	2		
14.	Organization and carrying out of anti-epidemic measures in conventional infections (cholera, plague, yellow fever) and zoonanthroponosis (anthrax, tularemia, leptospirosis, brucellosis, rabies).		4	6



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No.	THEME	Number of hours		
		Lectures	Practical hours	Self-training
	Public health emergencies. Infections with potential for spread. International Health Regulation. Protection of the territory.			
15.	Epidemiology of non-communicable diseases. Study of causality. The risk factors (anthropological, social, behavioral, natural, genetic) as determinants of communicable and non-communicable diseases. Methods of epidemiological studies. Types of epidemiological studies. Basic notions about epidemiological diagnosis.	2		
16.	Epidemiological methods applied in clinical epidemiology. The epidemiological analysis of infectious and non-infectious morbidity. Types of the research studies. Observational clinical studies: descriptive and analytical. Controlled and uncontrolled experimental clinical trials. Randomized controlled clinical trials. The screening. Practical assessment of diagnostic test validity in screening studies. The mathematical modeling of the clinical decision. The prediction of illness.		4	6
<b>Total</b>		<b>16</b>	<b>32</b>	<b>42</b>

**VI. PRACTICAL WORKS PURCHASED AT THE END OF THE COURSE**

**Mandatory essential practical tasks are:**

- To determine the mode, factors and routes of transmission of causative agents in anthroponosis, zooanthroponosis and sapronosis;
- To be able to organize, perform disinfection and sterilization of medical instruments, to evaluate their quality through various methods;
- Know how to store, transport and administer vaccines. evaluation of the efficacy and quality of immunoprophylaxis.
- Be able to organize and apply anti-epidemic measures in digestive infections.
- Be able to organize and apply anti-epidemic measures in respiratory infections.
- Be able to organize and apply anti-epidemic measures in parenteral infections.
- Be able to apply standard precautions and nosocomial infection prevention measures.
- Be able to organize and apply anti-epidemic measures in conventional infections and zooanthroponosis.
- Be able to organize measures for primary, secondary and tertiary prophylaxis of non-infectious diseases.
- Be able to perform epidemiological diagnosis, epidemiological analysis of infectious and non-infectious morbidity be able to apply epidemiological studies in medical practice.

**VII. REFERENCE OBJECTIVES OF CONTENT UNITS**

Objectives	Content units
<b>Chapter 1. Epidemic process</b>	
•To use correctly epidemiological terms in medical practice;	Epidemic process – concept, the maintenance, development and termination laws. The



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Objectives	Content units
<ul style="list-style-type: none"> <li>• To demonstrate schematically the development of the epidemic process in anthroponosis, zooanthroponosis and sapronosis;</li> <li>• to determine the mechanism, the factors and ways of transmitting of causative agents in anthroponosis, zooanthroponosis and sapronosis;</li> <li>• To determine the epidemic process manifestation forms;</li> </ul>	<p>structure and the development mechanism. The reservoir of the causative agents. The term of the source and reservoir of the causative agents in infectious diseases. The source of the causative agents in anthroponosis. The source of the causative agents in zooanthroponosis. The natural focal theory. The role of natural focal theory as a concept of development of the epidemic process in some zooanthroponosis. The source of the causative agents in sapronosis. Transmission mechanism – notion of the term and phases, transmission routs and factors. Natural focus, anthropological focus, biocenosis, ecosystem and biotope - notion of terms. The manifestation forms of the epidemic process.</p>
<b>Chapter 2. The anti-epidemic measures system.</b>	
<p><i>Chapter 2.1. Disinfection. Sterilization.</i></p> <ul style="list-style-type: none"> <li>• To organize and to be able to implement the high- and low-level disinfection. To know the methods of the quality assessment.</li> <li>• To be able to organize and provide the medical instruments sterilization with the quality assessment of the process at different stages.</li> </ul>	<p>The anti-epidemic measures system – disinfection and sterilization. Methods and means. Quality assessment methods.</p>
<p><i>Chapter 2.2. Immunoprophylaxis.</i></p> <ul style="list-style-type: none"> <li>• To know the vaccine types used in the National Immunization Program.</li> <li>• To know the rules of transportation and keeping of immuno-biological products, the essence of the “cold chain”.</li> <li>• To know the methods of immuno-biological products administration.</li> <li>• To know the post-immunization adverse events, indications and contraindications for vaccination.</li> <li>• To know the vaccine efficacy evaluation methods.</li> </ul>	<p>Immunoprophylaxis - concept of receptivity, resistance, immunity. The types of the immunity. The tools and means used in immunoprophylaxis. Indications and contraindications for immunization. National Immunization Program. The immunization according to the epidemiological indications. Organizing and performing vaccinations in family doctor's centers. Planning for vaccination. Assessment of the efficacy and quality of immunoprophylaxis. The role of the immune population for the development of the epidemic process.</p>
<b>Chapter 3. Epidemiology of infectious diseases.</b>	
<b>Chapter 3.1. Epidemiology of intestinal infections.</b>	
<ul style="list-style-type: none"> <li>• To know the principles of classification of infectious diseases according to source of causative agent and transmission mechanism.</li> </ul>	<p>Infectious diseases – principles of epidemiological classification principles of infectious diseases. Groups of infectious diseases. Infections caused by intestinal diseases of bacterial origin</p>



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<b>Objectives</b>	<b>Content units</b>
<ul style="list-style-type: none"> <li>• To know the epidemiological features of the manifestation and the preventive and control measures in intestinal diseases of bacterial origin;</li> <li>• To know epidemiological features of manifestation of enteroviral infections;</li> <li>• To apply prevention and control measures in case of enteroviral infections.</li> </ul>	<p>- general epidemiological features, the organization of preventive and antiepidemic measures.</p> <p>Enteroviral infections - general epidemiological features of enteroviral infections (HVA, enteroviruses, including acute hemorrhage conjunctivitis). Measures to prevent and control enteroviruses.</p>
<b>Chapter 3.2. Epidemiology of respiratory infections.</b>	
<ul style="list-style-type: none"> <li>• To know the epidemiological situation regarding the most frequently encountered respiratory infections, the epidemiological features and the manifestation of the epidemic process in respiratory infections at national and global level;</li> <li>• To know the principles of prevention of seasonal influenza and other respiratory infections preventable by vaccination;</li> <li>• To know and organize anti-epidemic measures in the outbreak in case of detection of respiratory infections.</li> </ul>	<p>Respiratory infections - epidemiological features in respiratory infections (diphtheria, measles, scarlet fever, mumps, influenza, TB, COVID-19 and others viral respiratory diseases). Prevention and control measures.</p>
<b>Chapter 3.3. Epidemiology of blood-borne infections.</b>	
<ul style="list-style-type: none"> <li>• To know the classification of blood-borne infections according to the transmission mechanism;</li> <li>• To know the general features of blood-borne infections;</li> <li>• To know the classification of blood-borne infections according to the mode of transmission;</li> <li>• To know the impact of parenteral blood-borne infections with artificial transmission mechanism on human health;</li> <li>• To know the structure of the virion that causes parenteral viral hepatitis and HIV infection;</li> <li>• To know the features of the factors and conditions of transmission of pathogens in blood-borne infections</li> </ul>	<p>Blood-borne infections - epidemiological features of parenterally transmitted infections (blood infections, HIV infections, septic-purulent infections, hemorrhagic Ebola infection, and trachoma). Prevention and control measures.</p>
<b>Chapter 3.4. Epidemiology of conventional infections and zoonanthroponosis. Public health emergencies.</b>	
<ul style="list-style-type: none"> <li>• To know the epidemiological classification of infectious diseases according to the sources of pathogens;</li> <li>• To know the etiological and epidemiological peculiarities in various zoonanthroponosis;</li> <li>• To know the manifestations of the infectious process in relation to the mode of transmission of the causative agent;</li> <li>• To know the theory of natural focus in zoonanthroponosis;</li> </ul>	<p>Epidemiological features in zoonanthroponosis (botulism, leptospirosis, hydrophobia). Epidemiological classification of zoonanthroponosis. Epidemiological features and risk factors (anthropogenic and natural) in various nosological forms. Content of prevention and control measures in zoonanthroponosis.</p> <p>Epidemiological features in conventional infections. International Sanitary Regulations of 2005. Sanitary protection of the territory.</p>





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<b>Objectives</b>	<b>Content units</b>
<ul style="list-style-type: none"> <li>• To know and organize prevention and control measures in various zoonoses;</li> <li>• To know the infections with pandemic spread potential, International Health Regulations (IHR). Public health emergencies.</li> </ul>	<p>Public health emergencies. The content of prevention and anti-epidemic measures in conventional infections (cholera, plague, yellow fever, hemorrhagic fevers Lassa, Ebola, Marburg).</p>
<b>Chapter 4. Clinical epidemiology. Epidemiology of healthcare associated infections.</b>	
<ul style="list-style-type: none"> <li>• To know the theoretical bases of clinical epidemiology;</li> <li>• To know the contributions of epidemiology in clinical activity;</li> <li>• To apply the clinical method and the epidemiological method in medical practice;</li> <li>• To know the methods of epidemiological studies used in medical practice.</li> <li>• To know the notion of healthcare associated infection (HCAI);</li> <li>• To know the clinical nosological forms of HCAI;</li> <li>• To know the etiological and epidemiological peculiarities of HCAI;</li> <li>• To know the Standard and Additional Precautions, to apply them in medical practice;</li> <li>• To know the methods for detecting HCAI.</li> </ul>	<p>Clinical epidemiology - the clinical method and the epidemiological method. The structure and content of clinical epidemiology. The role of the epidemiological method in evaluating the effectiveness and efficiency of diagnostic tests and the means of treatment and prophylaxis used in medicine. Types of studies in clinical epidemiology. Evidence-based medicine.</p> <p>Healthcare-associated infections (HCAI) - definition, terminology, topicality of the problem. Epidemiological, economic and social importance. HCAI classification. Etiological and epidemiological features. Risk factors. The problem of microbial antibiotic resistance. Conduct algorithm in HCAI diagnosis and treatment. Standard and Additional Precautions. Key elements of the Infection Prevention and Control Program. WHO recommendations. Simulation exercises. Carrying out a plan (mini-project) of prophylactic measures in HCAI. Cost-benefit evaluation of prophylaxis measures. Practical exercises to simulate epidemiological situations (medical accidents).</p>
<b>Chapter 5. Epidemiology of noncommunicable diseases.</b>	
<ul style="list-style-type: none"> <li>• To know the principles of manifestation of non-communicable diseases, epidemiological peculiarities, development mechanisms;</li> <li>• To know and carry out primary, secondary and tertiary prophylaxis measures;</li> <li>• To apply knowledge about infectious diseases to promote a healthy lifestyle.</li> </ul>	<p>Actuality of non-communicable diseases. Socio-economic impact. Forms of manifestation of the epidemic process in non-communicable diseases. The study of the epidemiology of non-communicable disease causation. Concept of cause/effect. The epidemiological approach to causality from effect to cause, and vice versa, from causes to effects. Identifying of causal relationships in relation to disease. Risk factors (antropurgic, social, behavioral, natural, genetic) as determinants of communicable and non-communicable diseases. General epidemiological features of non-</p>



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Objectives	Content units
	communicable diseases (cardiovascular, stroke, etc.). Notions of primary, secondary and tertiary prophylaxis.
<b>Chapter 6. The structure and content of epidemiological method of investigation.</b>	
<ul style="list-style-type: none"> <li>• To know the types of studies in epidemiological research;</li> <li>• To know the stages of an epidemiological study;</li> <li>• To apply various types of epidemiological research in medical practice;</li> <li>• To be able to carry out a scientific study by applying the meta-analysis.</li> </ul>	<p>The epidemiological diagnosis. The epidemiological investigation of the infectious and non-infectious morbidity. Notions of the retrospective and operative epidemiological studies (epidemiological diagnosis). The statistical methods used in the studying and analysis of the morbidity. Planning of the population health improvement measures. The notion of the public health epidemiological surveillance. The observational epidemiological studies: descriptive and analytical. Experimental epidemiological studies (randomized, field, natural, uncontrolled). Longitudinal and transversal studies. Meta-analysis.</p>

**VIII. PROFESSIONAL (SPECIFIC (SC)) AND TRANSVERSAL (TC) COMPETENCES AND STUDY OUTCOMES**

- ✓ **Professional (specific) (SC) competences**
  - **CP1.** Responsible execution of professional tasks with the application of the values and norms of professional ethics, as well as the provisions of the legislation in force.
  - **CP4.** Promoting a healthy lifestyle, applying prevention and self-care measures.
  - **CP8.** Carrying out the pedagogical and methodical-didactic activity within the technical and professional higher education institutions in the field of health.
- ✓ **Transversal competences (TC)**
  - **TC1.** Autonomy and responsibility in the activity.
  - **TC3.** Achieving interaction skills and social responsibility.
- ✓ **Study outcomes**
  - To make full use of epidemiological, microbiological, clinical and hygienic studies in the estimation of causes, conditions and mechanism of morbidity due to communicable and non-communicable diseases, selection of prevention and control methods.
  - To use the elements of the epidemiological anamnesis in the establishment of the infectious and invasive disease diagnosis;
  - To be aware of the importance of early diagnosis in infectious and invasive diseases as a premise for taking appropriate anti-epidemic measures.
  - To use effective epidemiological investigation methods (retrospective and operative epidemiological analysis) in the diagnosis of pathological conditions of the population and to take concrete actions of improvement.



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**Note.** Study outcomes (are deduced from the professional competencies and formative valences of the informational content of the discipline).

### IX. STUDENT'S SELF-TRAINING

No.	Expected product	Implementation strategies	Assessment criteria	Implementation terms
1.	Use of information sources	Reading of the lecture information or the respective information on the subject in the textbook. Reading of the questions on the subject, and self-assessment according to the tests presented in the manual. Collecting of information from additional information sources on the topic. Reading of the topic and choosing of the essential content. Wording of generalizations and conclusions regarding the importance of the topic / subject.	Test, assessment by case studies	Throughout the module
2.	Situational problems or case studies solving	The student receives situation-based problems or case studies on a particular topic and presents their solving on the topic.	Written and oral tests	Throughout the module
3.	Working with online materials	Studying the current issue of the topic presented by lecturer and reporting it to the student group.	Oral tests	Throughout the module
4.	Making of a scientific project	Choosing of the research theme, development of the research plan, and of project components, PowerPoint Presentation - theme, purpose, literature study results, conclusions, references. Reviews from colleagues and lecturer.	Oral tests	Throughout the module

### X. METHODOLOGICAL SUGGESTIONS FOR TEACHING-LEARNING-ASSESSMENT

- ***Teaching and learning methods used***

In the didactic process, traditional and non-traditional methods of study according to the principles of psycho-pedagogy are applied.

Classical methods: lecture, explanation, exposure, conversation, exercise, demonstration, didactic role-playing, summary, working with the manual etc.

Alternative methods: simulation of a real situation, case study, reflection, project, learning by discovery, programmed training, self-evaluation, intensified lecture, mutual teaching, practical tasks, epidemiological situational problems with the application of the PBL (Problem-based learning) reports on theme of the lesson, methods of prospective and retrospective epidemiological analysis.

- ***Applied teaching strategies / technologies (specific to the discipline)***

“Brainstorming”, " Round Table "; "Group Interview"; "Case Study"; "Presentations", "Reports",



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"Scientific Conferences".

- **Methods of assessment** (including the method of final mark calculation)

**Current:** testing; problems / exercises solving, clinical cases analysis, simulation.

**Final:** Exam.

### Method of mark rounding at different assessment stages

Intermediate marks scale (annual average, marks from the examination stages)	National Assessment System	ECTS Equivalent
1,00-3,00	2	F
3,01-4,99	4	FX
5,00	5	E
5,01-5,50	5,5	
5,51-6,0	6	
6,01-6,50	6,5	D
6,51-7,00	7	
7,01-7,50	7,5	C
7,51-8,00	8	
8,01-8,50	8,5	B
8,51-8,00	9	
9,01-9,50	9,5	A
9,51-10,0	10	

The average annual mark and the marks of all stages of final examination (computer assisted, test, oral) - are expressed in numbers according to the mark scale (according to the table), and the final mark obtained is expressed in number with two decimals, which is transferred to student's record-book.

*Absence on examination without good reason is recorded as "absent" and is equivalent to 0 (zero). The student has the right to have two re-examinations.*

## XI. RECOMMENDED LITERATURE:

### A. **Compulsory:**

1. Prisacari V. Epidemiologie generală. Bazele medicinei prin dovezi. Ediția a II-a. Chişinău, 2020
2. Prisacari V. Epidemiologia specială. Chişinău, 2015.
3. Prisacari V., Paraschiv A., Cotelea Ad., et al.; Epidemiologie – manual de lucrări practice. Chişinău, 2017
4. Materialele cursurilor.
5. Ivan. A. Tratat de epidemiologie. Iaşi, 2002.
6. Cotelea Ad., Prisacari V. Epidemiologia în situații excepționale. Chişinău, 2009.
7. Prisacari V., Paraschiv A., Cotelea Ad, Guțu L. Epidemiologia în teste: Facultățile de Medicină și Stomatologie. Chişinău, 2018.



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