



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 2/15

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 in medical practice the preventive and anti-epidemic measures to prevent and stop the morbidity. 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 antiepidemic measures. On the same note, during epidemiology classes, students develop capabilities for the assessment and solving of 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 to future doctors in general and special epidemiology, organization and implementation of prophylactic and antiepidemic measures

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

II. MANAGEMENT OF THE DISCIPLINE

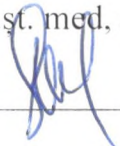
Code of discipline	S.08.O.070		
Name of the discipline	Epidemiology		
Person in charge of the discipline	Paraschiv Angela		
Year	IV	Semester	8
Total number of hours, including:			90



FACULTY OF MEDICINE
STUDY PROGRAM 0912.1 MEDICINE
DEPARTMENT OF EPIDEMIOLOGY

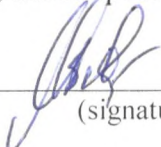
APPROVED

at the meeting of the Commission for Quality Assurance and Evaluation of the Curriculum faculty Medicine 2
Minutes No. 7 of 6.03.2017

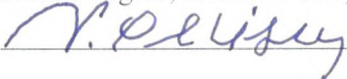
Chairman dr. hab.st. med, assoc. profesor
Suman Serghei 
(signature)

APPROVED

at the Council meeting of the Faculty Medicine 2
Minutes No. 9 of 20.03.2018

Dean of Faculty PhD, assoc. profesor
Mircea Bețiu 
(signature)

APPROVED

approved at the meeting of the chair epidemiology
Minutes No. 1 of 26.08.2017
Head of chair _____
(academic degree, scientific title)
Viorel Prisacari 

SYLLABUS

DISCIPLINE EPIDEMIOLOGY

Integrated studies

Type of course: **Compulsory**

Chisinau, 2018



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page: 3/15

Lectures	20	Practical/laboratory hours	20
Seminars	25	Self-training	25
Clinical internship			
Form of assessment	CD	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;
- 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 opposite, from cause to effect;



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 4/15

- 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 exceptional situations (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.
 - 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, physician, surgeons, health managers in preventing 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 train future doctors at the university stage 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. On the same note, within hours of clinical epidemiology, the student develops skills to assess



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:

06

Date:

20.09.2017

Page. 5/15

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. d/o	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 subject of study. The structure and content of the epidemiological investigation. The epidemic process. Theoretical basis of the study of epidemic process. The structure, factors, mechanism of development and manifestations of the epidemic process. The system of anti-epidemic measures. Epidemiological measures directed to the source of pathogens.	2		
2.	Epidemic process. Structure, factors and mechanism of development of the epidemic process. Manifestations of epidemic process.		5	2
3.	Measures directed to the mechanism of transmission. Sterilization, disinfection and disinsection.	2		
4.	Control measures directed to the source of pathogens in anthroponosis, zooanthroponosis and mechanism of transmission (disinfection, disinsection, and sterilization).		5	2
5.	Immunoprophylaxis of infectious diseases.	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 of biological products. Adverse reactions appeared after the vaccination. Indications and contraindications to perform immunoprophylaxis. 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.		5	2
7.	Epidemiology of digestive infections. Prophylactic and anti-epidemic measures.	2		
8.	Epidemiological investigation in outbreak of infectious diseases.		5	2



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:
06
Date:
20.09.2017
Page. 6/15

No. d/o	THEME	Number of hours		
		Lectures	Practical hours	Self- training
9.	Epidemiology of respiratory infections. Prophylactic and anti-epidemic measures.	2		
10.	Organization and carrying out of anti-epidemic measures in digestive infections (typhoid fever, Shigellosis, salmonellosis, food poisons, viral hepatitis with fecal-oral mechanism of transmission).		5	2
11.	Epidemiology of blood-borne infections. Prophylactic and anti-epidemic measures.	2		
12.	Organization and carrying out of control measures in respiratory infections (diphtheria, measles, scarlet fever, mumps, influenza).		5	2
13.	Organization and content of anti-epidemic measures in disasters.	2		
14.	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).		5	2
15.	Epidemiology of non-communicable diseases. Study of causality in the epidemiology of non-communicable diseases. The concept of cause/effect. Risk factors (anthropological, social, behavioral, natural, genetic) as determinants of communicable and non-communicable diseases. Sources generating the pathogens aggressive to human health. Primary, secondary and tertiary prophylaxis.	2		
16.	Organization and carrying out of anti-epidemic measures in conventional infections (cholera, plague, yellow fever) and zoonanthroponosis (anthrax, tularemia, leptospirosis, brucellosis, rabies). Organization and carrying out of antiepidemic measures in exceptional situations. Features of the epidemiological situation in the area of calamity. Antibacterial protection. Antiepidemic measures at medical evacuation stages. Bacteriological recognition and indication for the biological weapon.		5	2
17.	Fundamental elements of clinical epidemiology. Definition. Purpose and objectives. The place and role of clinical epidemiology in medical practice. Structure and content of clinical epidemiology. Pharmacoepidemiology. Infections associated with healthcare. Content and organization of epidemiological surveillance and control of healthcare associated infections.	2		
18.	Methods of epidemiological studies. Basic notions about epidemiological diagnosis. The role of the epidemiological method of investigation in the assessment of efficacy and effectiveness of diagnostic tests and means of treatment used in medicine. Types of epidemiological studies.		5	2
19.	Healthcare associated infections. Criteria for the determination of infections associated with healthcare. The classification of healthcare associated infections. Potential sources of pathogens. Factors and ways of transmission. Measures to determine the risk of nosocomial infections in the hospital environment. The algorithm of conduct in case of nosocomial infections diagnosis and treatment. Sanitary-hygienic and antiepidemic regime in medical institutions. Standard and additional precautions in nosocomial infections. Methodology of	2		



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:	06
Date:	20.09.2017
Page. 7/15	

No. d/o	THEME	Number of hours		
		Lectures	Practical hours	Self-training
	nosocomial infection surveillance. Features of epidemiological surveillance in medical institutions of different profile. Legislation. Institutional and individual tasks in the prevention of nosocomial infections (hospital committee, CEO of the hospital, head of the department, doctor, nurse, microbiologist, pharmacist, epidemiologist, etc.). The use of antibiotics in hospital practice. The use of electronic information system in the recording and monitoring of antibiotic resistance.			
20.	Epidemiological methods applied in clinical epidemiology. The epidemiological analysis of infectious and non-infectious morbidity. Types of the research studies. The structure and content of clinical trials. Observational clinical studies: descriptive and analytical. Application of descriptive methods and epidemiological indicators in the assessment of morbidity, economic and social impact in nosocomial infections. The application of analytical methods in determination of the risk factors. Measuring the risk for nosocomial infections. Controlled and uncontrolled experimental clinical trials. Randomized controlled clinical trials in determination of the efficacy and effectiveness of diagnostic and treatment methods. The screening. Practical assessment of diagnostic test validity in screening studies. The mathematical modeling of the clinical decision. The prediction of illness.		5	2
Total		20	50	20

VI. REFERENCE OBJECTIVES OF CONTENT UNITS

Objectives	Content units
Chapter 1. Epidemic process	
<ul style="list-style-type: none"> • To use correctly epidemiological terms in medical practice; • To demonstrate schematically the development of the epidemic process in anthroponoses, zooanthropoies and sapronoses; • to determine the mechanism, the factors and ways of transmitting of causative agents in anthroponoses, zooanthroponoses and sapronoses; • To determine the epidemic process manifestation forms; 	<p>Epidemic process – concept, the maintenance, development and termination laws. The 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</p>



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:

06

Date:

20.09.2017

Page. 8/15

Objectives	Content units
	factors. Natural focus, anthropological focus, biocenosis, ecosystem and biotope - notion of terms. The manifestation forms of the epidemic process.
Chapter 2. The anti-epidemic measures system.	
<p><i>Chapter 2.1. Disinfection. Sterilization.</i></p> <ul style="list-style-type: none"> To organize and to be able to implement the high and low level disinfection. To know the methods of the quality assessment. To be able to organize and provide the medical instruments sterilization with the quality assessment of the process at different stages. 	The anti-epidemic measures system – disinfection and sterilization. Methods and means. Quality assessment methods.
<p><i>Chapter 2.2. Immunoprophylaxis.</i></p> <ul style="list-style-type: none"> To know the vaccine types used in the National Immunization Programme. To know the rules of transportation and keeping of immuno-biological products, the essence of the “cold chain”. To know the methods of immuno-biological products administration. To know the vaccine side effects and the contraindications for immunization. To know the vaccine efficacy evaluation methods. 	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 Programme. 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.
Chapter 3. Epidemiology of infectious diseases.	
Chapter 3.1. Epidemiology of intestinal infections.	
<ul style="list-style-type: none"> To know the principles of classification of infectious diseases according to source of causative agent and transmission mechanism. To know the epidemiological features of the manifestation and the preventive and antiepidemic measures in intestinal diseases of bacterial origin; To know epidemiological features of manifestation of enteroviral infections; To apply prevention and control measures for enterovirus infections; 	<p>Infectious diseases – principles of epidemiological classification principles of infectious diseases.</p> <p>Groups of infectious diseases. Infections caused by intestinal diseases of bacterial origin - general epidemiological features, the organization of preventive and antiepidemic measures.</p> <p>Enteroviral infections - general epidemiological features of enteroviral infections (HVA, enterovirosis, including acute haemorrhage conjunctivitis). Organization and content of anti-epidemic measures in enterovirus infections.</p>
Chapter 3.2. Epidemiology of respiratory infections.	
<ul style="list-style-type: none"> To know the epidemiological situation regarding the most frequently encountered respiratory infections, the 	Respiratory infections - epidemiological features in respiratory infections (diphtheria,



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:

06

Date:

20.09.2017

Page. 9/15

Objectives	Content units
<p>epidemiological features and the manifestation of the epidemic process in respiratory infections at national and global level;</p> <ul style="list-style-type: none"> • To know the principles of prevention of seasonal influenza and other respiratory infections preventable by vaccination; • To know and organize anti-epidemic measures in the outbreak in case of detection of respiratory infections. 	<p>measles, scarlet fever, mumps, influenza, TB and others viral respiratory diseases). Organization and carry out of preventive and antiepidemic measures.</p>
<p>Chapter 3.3. Epidemiology of blood-borne infections.</p>	
<ul style="list-style-type: none"> • To know the classification of blood-borne infections according to the transmission mechanism; • To know the general features of blood-borne infections; • To know the classification of blood-borne infections according to the mode of transmission; • To know the impact of parenteral blood-borne infections with artificial transmission mechanism on human health; • To know the structure of the virion that causes parenteral viral hepatitis and HIV infection; • To know the features of the factors and conditions of transmission of pathogens in blood-borne infections 	<p>Blood-borne infections - epidemiological features of parenterally transmitted infections (blood infections, HIV infections, septic-purulent infections, hemorrhagic Ebola infection, and trachoma). Preventive and antiepidemic measures.</p>
<p>Chapter 3.4. Epidemiology of healthcare associated infections.</p>	
<ul style="list-style-type: none"> • To know the definition of healthcare associated infections. • To know the clinical nosological forms of nosocomial infections; • To know the etiological and epidemiological features of healthcare associated infections. • To know the Standard Precautions Measures and to apply them in medical practice; • To know methods of screening of healthcare associated infections 	<p>Healthcare associated infections - notion, terminology, actuality. The socio-economic importance of the HCAI. Classification of HCAI. Identification criteria. Etiological and epidemiological futures. Risk factors. The problem of antibiotic resistance. Preventive and anti-epidemic measures. The WHO recommendations for the prevention of HCAI. The preventive measures of nosocomial infections among healthcare workers.</p>
<p>Chapter 3.5. Epidemiology of conventional and zoonosis infections</p>	
<ul style="list-style-type: none"> • To know the principles of classification of infectious diseases according to the source of causative agent and transmission mechanism. • To know the etiological and epidemiological features in various zoonosis; • To know the manifestations of the infectious process in relation to the mode of transmission of the causal agent; • To know the theory of natural focality in zoonosis; 	<p>Conventional and zoonosis infections - the notion of zoonosis, epidemiological features in conventional infections. The International Health Regulations from 2005. Content of preventive and antiepidemic measures in conventional infections (cholera, fever, yellow fever, hemorrhagic fever Lassa, Ebola, Marburg). Epidemiological features in zoonosis (botulism, leptospirosis, rabies). Epidemiological classification of</p>



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:

06

Date:

20.09.2017

Page. 10/15

Objectives	Content units
<ul style="list-style-type: none"> • To know and to organize prophylactic and antiepidemic measures in various zoonthroponosis. 	zoonthroponosis. Epidemiological features and risk factors (antropurgic and natural) in various nosological forms. Content of preventive and antiepidemic measures in zoonthroponosis.
Chapter 4. Epidemiology of non-communicable diseases.	
<ul style="list-style-type: none"> • To know the principles of manifestation of non-communicable diseases, epidemiological peculiarities, development mechanisms; • To know and carry out primary, secondary and tertiary prophylaxis measures; • To apply knowledge about infectious diseases to promote a healthy lifestyle. 	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-communicable diseases (cardiovascular, stroke, etc.). Notions of primary, secondary and tertiary prophylaxis.
Chapter 5. Clinical epidemiology.	
<ul style="list-style-type: none"> • To know the theoretical basis of clinical epidemiology; • To know the contribution of epidemiology in clinical activity; • To apply the clinical method and epidemiological method in clinical practice; • To know the methods of epidemiological studies used in medical practice. 	Clinical epidemiology - clinical method and epidemiological method. Structure and content of clinical epidemiology. The role of the epidemiological method in the assessment of 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. Epidemiological features of healthcare associated infections. Standard case definition of HCAs. Prevention and control of nosocomial infections. Classification and etiological features of healthcare associated infections. The problem of antimicrobial resistance. The algorithm for diagnosis and treatment of nosocomial infections. Standard precautions and additional measures. Simulation exercises. Making of a plan (mini project) measure of prevention of healthcare associated infections. Cost-benefit evaluation of prophylactic measures. Practical exercises to



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:

06

Date:

20.09.2017

Page. 11/15

Objectives

Content units

simulate epidemiological situations (medical accidents).

Chapter 6. The structure and content of epidemiological method of investigation.

- To know the types of studies in epidemiological research;
- To know the stages of an epidemiological study;
- To apply various types of epidemiological research in medical practice;
- To be able to carry out a scientific study by applying the meta-analysis.

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.

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

✓ **Professional (specific) (SC) competences**

- PC1. Knowledge and understanding of theory and basic practical epidemiological methods with the application of evidence-based medicine to ensure adequate management in everyday medical practice.
- PC2. Knowledge of epidemiological and clinical research methods and their application in medical practice.
- PC3. Knowledge of epidemiological features in various nosological forms and groups of communicable and non-communicable diseases.
- PC4.1. Knowledge of epidemiological features, epidemiological surveillance and control of healthcare associated infections.
- PC4.2. The use of basic knowledge of the structure, mechanism of development and manifestation of infectious and non-infectious morbidity.
- PC5. Elucidation of risk factors which determine morbidity in infectious and noninfectious diseases.
- PC6. Knowledge of methods and means of prevention and control of infectious and noninfectious diseases, assessment criteria.

✓ **Transversal competences (TC)**

- **TC1.1.** Improvement of the decision-making autonomy.
- **TC1.2.** Personal attitude forming.



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:

06

Date:

20.09.2017

Page. 12/15

- **TC1.3.** Ability to social interaction, participation in group activities with different roles.
- **TC1.4.** Application of rigorous and efficient work rules, manifesting a responsible attitude to science and teaching, for the optimal and creative valorization of their own potential in specific situations, in compliance with the principles and norms of professional ethics.
- **TC2.1.** Fitting in interdisciplinary projects, extracurricular activities.
- **TC2.2.** Improvement of the digital skills.
- **TC2.3.** Development of various learning techniques.
- **TC3.1.** Selecting digital, critical analysis and drawing of conclusions.
- **TC3.2.** Presentation of individual scientific projects;

✓ 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 antiepidemic 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.

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

VIII. 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



CD 8.5.1 DISCIPLINE CURRICULUM

Edition:

06

Date:

20.09.2017

Page. 13/15

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

IX. 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", "Scientific Conferences".

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

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

Final: colloquium with mark.

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	



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 14/15

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.

X. RECOMMENDED LITERATURE:

A. Compulsory:

1. Prisacari V. Epidemiologie generală. Bazele medicinei prin dovezi. Chişinău, 2012.
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. Prisacari V. și al. Epidemiologia (manual pentru lucrări practice). Chişinău, 1999.
6. Ivan. A Tratat de epidemiologie. Iași, 2002.
7. Cotelea Ad., Prisacari V. Epidemiologia în situații excepționale. Chişinău, 2009.
8. Prisacari V., Guțu L., Cotelea Ad., A.Paraschiv Epidemiologia în teste. Ediția II-a, Chişinău, 2011
9. Prisacari V., Cotelea Ad., Barabaș M., Guțu L., Malai E. Epidemiologia situațională. Chişinău, 2006.
10. Ghid de supraveghere și control în infecții nosocomiale, USAID, Chişinău, 2009, Ediția II
11. V.Chicu, G.Obreja, Prisacari V. Eidemiologia de intervenție. Chişinău, 2008
12. Brumboiu Maria Irina. Metode epidemiologice de bază pentru practica medicală. Cluj-Napoca, 2005
13. Зуева Л.П., Яфаев Р.Х. Эпидемиология. Санкт-Петербург, 2006
14. Покровский В.И., Брико Н.И. Общая эпидемиология с основами доказательной медицины. Руководство к практическим занятиям. Москва, 2008

B. Additional



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 15/15

1. V. Prisacari, A.Paraschiv, C.Spînu, T.Holban, etc. Hepatitele virale parenterale și cirozele hepatice-epidemiologia, clinică, diagnosticul, tratamentul, prevenirea și controlul. Chișinău, 2013.
2. Ghid practic. Imunizările în activitatea medicului de familie. Chișinău, 2012
3. Doina Azoicăi. Vaccinologie. Iași, 2009
4. Покровский В.И., Пак С. и др. Инфекционные болезни и эпидемиология. Москва, 2008
5. Valeriu Chicu. Supravegherea și controlul bolilor infecțioase. Chișinău, 2007, 173p.
6. V. Chicu, Gh. Curocichin, Gh. Friptuleac. Promovarea sănătății (curs). Chișinău, 2006, 228 p.
7. Viorel Prisăcaru, Emilia Malai. Optimizarea educației pentru sănătate după modelul infecțiilor intestinale. Chișinău, 2006, 99 p.
8. Voșsan I.S. Epidemiologia generală, Cluj-Napoca, 2006
9. Руководство к практическим занятиям по эпидемиологии инфекционных болезней. Брико Н.И, Покровский В.И, Москва, 2006.
10. Brumboiu Maria. Metoda epidemiologică de bază pentru practica medicală. Cluj-Napoca, 2005.
11. Baicuș Cristian Dicționar de epidemiologie clinică și medicina bazată pe dovezi. București, 2002.
12. Черкасский Б.Л. Частная эпидемиология. Том 1, Медицина, М, 2002
13. Черкасский Б.Л. Частная эпидемиология. Том 2, Медицина, М, 2002
14. Obreja Gavril Metode de studiu în epidemiologia aplicativă. Chișinău, 2002
15. Черкасский Б.Л. Руководство по общей эпидемиологии. Медицина, Москва, 2001
16. Vetter Norman Epidemiology and public health in medicine. Edinburgh, 1999
17. Voșsan I.S.. Aplicații în epidemiologie și biostatistică. Cluj- Napoca, 1996.
18. Constantin Ciufecu, Viorel Prisacari. Vibrionul holeric - holera. Chișinău, 1995, 150p.
19. Беляков В.Д., Р.Х.Яфаев. Эпидемиология. Москва, 1989.