



**APPROVED**

**EMD decision**

" 15 / 2021 "

**Protocol No. 6**

**Chairman of the EMC, Vice-Rector,  
candidate of pedagogical sciences,  
associate professor Apezova D.U.**

## **SYLLABUS by discipline**

### **B.3.8.4. EPIDEMIOLOGY**

For students of the educational program, higher professional education in the specialty 560001 "General Medicine" (5-year education) in the specialty "Doctor"

Type of study work	Total hours
course	5
Semester	9
Number of weeks	18
Credits	3
The total complexity of the discipline	90
Classroom/practical studies (PS)	54
Student Independent Work (SIW)	36
Forms of control	
current control	Testing, oral questioning, written test
Frontier control	Testing
Midterm	Testing
Final control	exam
Semester rating by discipline:	Point-rating system

### **Information about the teacher of the academic discipline**

Full Name	Atambaeva Raisa Minahmedovna
Post	Teacher
Academic degree	
Academic title	
Email address	
Location of the department (address)	KR, Bishkek, st. Shabdan Baatyr 128, floor 2, room 6
Telephone	0775983xxx
Consultation hours	11.00-13.30

### **Characteristics of the study discipline**

*The purpose of the study* of the discipline. In mastering the discipline students acquire theoretical knowledge and practical skills on the system of anti-epidemic measures, the importance of immunoprophylaxis in the fight against infectious diseases, epidemiological features of infectious diseases, which are widely spread in the Kyrgyz Republic and military epidemiology is explained. Students learn about the role of epidemiology in the modern structure of medical science, the classification of infectious diseases, the system of preventive and anti-epidemic measures. The concept of disinfection, disinsection, deratization and sterilization, the system of anti-epidemic measures (SPEM, the classification of SPEM.

During the course, students learn about the activities aimed at combating infectious diseases. The definition and concept of disinfection, disinsection, deratization and sterilization is given. The quality control of disinfection and sterilization measures in medical institutions is considered. The concepts of military epidemiology, its sections and tasks are given. Students are acquainted with the basics of legislation on the sanitary-epidemiological welfare of the population, the main official documents regulating the anti-epidemiological service of the population in infectious and parasitic diseases, international medical and sanitary rules, the epidemiology of infectious and parasitic diseases, implementation of anti-epidemiological measures, protection of the population in foci of especially dangerous infections, in natural disasters, epidemiological features of certain nosological forms, the attitude towards the epidemic of the population. By the end of the course students can organize preventive and anti-epidemic measures at the threat of the emergence and spread of CSIs in the supervised territory, survey the CSI epidemic hotbed, determine its spatial and temporal boundaries. Apply the method of rapid collection of information on the incidence of diseases and objects of the natural and social environment that may contribute to the spread of infectious and mass non-infectious diseases. Analyze the completeness, quality and effectiveness of preventive and anti-epidemic measures. Can make a plan for preventive and anti-epidemic measures for a particular infectious pathology, taking into account the surrounding environment.

**Prerequisites of the discipline:**

- Faculty Therapy
- Hospital therapy
- Outpatient therapy
- Pediatric Medicine
- Surgical Diseases
- Urology
- Obstetrics and Gynecology
- Family medicine
- Fundamentals of Psychology and Communication and Medical Communication
- Coronavirus: New Challenges.
- Inpatient physician assistant.

**Postrequisites of the discipline:**

- Ambulatory Surgery
- Public Health and Health Care
- Epidemiology
- Clinical pharmacology
- Psychiatry and addiction medicine
- Phthisiology
- Tropical Medicine
- Health care management
- Physician Assistant to the CMC

**Learning outcomes of the discipline according to the RO GPP**

The study of the discipline of microbiology, virology and immunology will contribute to the achievement of the learning outcomes (RE) of the GEP:

**RE-8-** Interpret, analyze, and evaluate data from clinical-laboratory and instrumental diagnostic methods, and formulate a treatment plan, including emergency care, taking into account urgent and priority signs of illness.

The discipline is expected to achieve the following learning outcomes of the discipline, which are implemented in the attainment of competencies:

**PC-13** - able and ready to carry out anti-epidemic measures, protection of the population in foci of especially dangerous infections, in the deterioration of the radiation situation and natural disasters, and other emergencies.

**PC-17** - able and ready to perform basic therapeutic measures for the most common diseases and conditions in adults and children in outpatient and inpatient conditions;

## Content of the discipline

№№	Name of topics
1.	<b>Section 1: General Epidemiology</b>
2.	The place of epidemiology in the modern structure of medical science. Classification of infectious diseases. Basics of teaching about the epidemic process.
3.	System of preventive and anti-epidemic measures. The concept of disinfection, disinsection, deratization and sterilization.
4.	The value of immunoprophylaxis in the fight against infectious diseases
5.	Epidemiology as a general medical science of epidemic process. Doctrine of epidemic process.
6.	System of anti-epidemic measures (SEMS). Classification of SEMS. The concept of activities aimed at combating infectious diseases. The concept of activities aimed at the prevention of infectious diseases. Disinfection, disinsection, deratization and sterilization. Disinfection and sterilization regimes in medical institutions of the dental profile. Quality control of disinfection-sterilization measures in medical institutions.
7.	The importance of immunoprophylaxis in the fight against infectious diseases
8.	<b>Section 2. Private Epidemiology</b>
9.	Epidemiological features and system of preventive and anti-epidemic measures for controlled and uncontrolled aerosol infections
10.	Epidemiological features and system of prophylactic and anti-epidemic measures for intestinal infections
11.	Epidemiological features and system of prophylactic and anti-epidemic measures for helminth infections
12.	Epidemiological peculiarities and system of prophylactic and anti-epidemic measures against zoonotic diseases
13.	Epidemiology and prophylaxis of respiratory tract infections (diphtheria, whooping cough, measles, rubella, influenza, chicken pox and mumps, influenza and acute respiratory diseases)
14.	Epidemiology and prevention of intestinal infections (typhoid, enteric hepatitis, shigellosis, poliomyelitis)
15.	Epidemiology, prevention of helminth infections (enterobiasis, ascariasis, echinococcosis).
16.	Epidemiology and prevention of zoonotic diseases (brucellosis, rabies, anthrax).
17.	<b>Section 3: Military Epidemiology</b>
18.	Military epidemiology, sections and objectives. Bacteriological reconnaissance.
19.	Content and organization of antiepidemic measures in troops in peacetime and wartime. Bases of anti-bacteriological protection of troops at stages of medical evacuation.
20.	Subject matter and methods of military epidemiology. Notion of bacterial weapons. Classification of bacterial weapons. Content and organization of antiepidemic measures at the stages of medical evacuation.
21.	Epidemiological situation during military conflicts
22.	Anti-epidemic measures during military conflicts
23.	Periods of development of epidemiology as a medical science
24.	Epidemiological analysis of infectious morbidity
25.	Prophylactic use of vaccines and anatoxins
26.	Prophylactic use of gamma-globulins and immune serums
27.	Disinfection regime in the organizations of different profiles
28.	Non-specific prophylaxis of infectious diseases
29.	Epidemiology of anthroponoses with fecal-oral mechanism of transmission
30.	Epidemiology of anthroponoses with aerosol transmission mechanism
231.	Epidemiology of HIV infection and parenteral viral hepatitis

### List of main and additional literature:

#### Main literature:

Pokrovsky V.I., Pak S.G., Brico N.I., Danilkin B.K. Infectious Diseases and Epidemiology: Textbook M.: GEOTAR-Media 2017

#### Additional literature:

1. Ed. by Toigombaeva V.S. Issues of Applied Epidemiology: Methodological Handbook Editorial Office "Bilim" 2017 5.

2. Infectious diseases and epidemiology: [textbook for medical universities] V. I. Pokrovsky, S. G. Pak, N. I. Brico, B. K. Danilkin. Moscow: GEOTAR-Media 2015.
3. Yushchuk N.D. Epidemiology textbook N.D. Yushchuk, V.V. Martynov, Yu.

#### Internet Resources:

<http://marc.rsmu.ru>  
<http://eor.edu.ru>  
<http://www.elibrary.ru>  
[www.studmedlib.ru](http://www.studmedlib.ru)  
<http://www.edu.ru>  
<http://www.medicina.ru>

### Monitoring and evaluation of learning outcomes

#### The content of the rating system for assessing student performance

The rating assessment of students' knowledge in each academic discipline, regardless of its total labor intensity, is determined on a 100 (one hundred) - point scale and includes current, boundary, intermediate and final control.

The distribution of rating scores between types of control is established in the following ratio (according to the table of the score-rating system of assessments):

Form of control				
current (CC)*	boundary control (BC)**	mid-term exams (MC)***	Final /exam (FE)	Discipline Rating (RD)
0-100 points	0-100 points	0-100 points	0-100 points	0-100 points, with the translation of points into a letter designation

Note:

\*  $TK(middle) = \frac{\sum_1^n \times point}{\sum_1^n}$ , where n is the number of types of classroom and extracurricular work of students in the discipline;

\*\*  $PK(middle) = \frac{\sum_1^n credit \times point}{\sum_1^n credits}$ , where n is the number of modules (credits) in the discipline;

\*\*\*  $PK(middle) = \frac{\sum_1^n \times point}{\sum_1^n}$ , where n is the number of intermediate controls (2 controls per semester: in the middle and at the end of the semester) by discipline;

\*\*\*\* ИК – examination conducted at the end of the study of the discipline

;

\*\*\*\*\*  $PД = \frac{TK_{cp} + PK_{cp} + PK_{cp} + ИК}{4}$ , the final rating of the results of all types of control at the end of the discipline;

$GPA = \frac{\sum_1^n \times балл}{\sum_1^n}$  where, n is the number of disciplines in the semester (for the past period of study).

A student who has not passed the current, boundary and intermediate controls to the final control (exam) is not allowed.

**The current control** is carried out during the period of classroom and independent work of the student on time according to the schedule, at the end of the study of the discipline, the average score of the current control (CC) is calculated. *Forms of current control can be:*

- testing (written or computerized);
- performance of individual homework assignments, abstracts and essays;
- student's work in practical (seminar) classes;
- various types of colloquia (oral, written, combined, express, etc.);
- control of performance and verification of reporting on laboratory work;
- visiting lectures and practical (seminar, laboratory) classes;
- Incentive rating (up to 10 points).

Other forms of current monitoring of results are also possible, which are determined by the teachers of the department and recorded in the work program of the discipline.

**The frontier control** is carried out in order to determine the results of the student's development of one credit (module) as a whole. *Frontier control* should be carried out only in writing, at the end of the study

of the discipline, the average score of boundary control (BC) is calculated. As forms of *frontier control* of the training module, you can use:

- testing (including computer testing);
- interview with written fixation of students' answers;
- test.

Other forms of intermediate control of results are also possible.

**Intermediate control (mid-term exams)** is carried out in order to check the completeness of knowledge and skills in the material in the middle and end of the semester (2 times per semester) of studying the discipline, by the end of the study of the discipline, the average score of intermediate control (PCsr) is calculated, *forms of intermediate control (mid-term exams) can be:*

- testing (including computer testing);
- interview with written fixation of students' answers;
- test.

Other forms of intermediate control of results are also possible.

**The final control** is carried out during the session, by conducting an exam, it can be carried out in the following forms:

- testing (including computer testing);
- written exam (ticketing system).

### Correspondence of the point-rating system of assessments used by the institute and the assessments of the European system for the transfer of credit units, labor intensity (ECTS)

Grade						Criterion
System of letters	digital system	Traditional system	Points (%)	Scored points (max - 100)	Evaluation by discipline without an exam	
A	4	5	95-100	95-100	Credited/ passed	"Excellent" - deserves a student who has shown a deep, systematic and comprehensive knowledge of the educational material, who freely performs practical tasks, who has mastered the recommended basic and additional literature on the discipline
A-	3,67		90-94	90-94		"Excellent" - deserves a student who has shown a deep, systematic and comprehensive knowledge of the educational material, who freely performs practical tasks, who has mastered the recommended basic literature on the discipline, but is not familiar with additional literature
B+	3,33	4	85-89	70-89		"Good" - exhibited to a student who has shown a systematic and comprehensive knowledge of the educational material, able to independently replenish and update this knowledge in the course of training, performing practical tasks, familiar with the main literature on the discipline
B	3,0		80-84			"Good" is given to a student who has shown a systematic and comprehensive knowledge of the educational material, who is able to independently replenish this knowledge in the course of training, performing practical tasks, but not fully familiar with the main literature on the discipline
B-	2,67		75-79			"Good" - is given to a student who has shown the systematic nature of knowledge in the discipline, who is able to independently replenish this knowledge in the course of training, performing practical tasks, but not fully familiar with the main literature on the discipline
C+	2,33	3	70-74	50-69		"Satisfactory" - is given to a student who does not have a systematic nature of knowledge in the discipline, who is not capable of independently replenishing and updating knowledge in the course of further education, performing practical tasks with errors
C	2,0		65-69			"Satisfactory" - is given to a student who made mistakes in completing assignments, but who has the necessary knowledge to eliminate them under the guidance of a teacher
C-	1,67		60-64			"Satisfactory" - is set to a student who made errors in the performance of tasks, but who has the possible knowledge to eliminate them under the guidance of a teacher
D+	1,33		55-59			"Satisfactory" - is set to a student who made errors in the performance of tasks, who does not have the necessary knowledge to eliminate them
D-	1,0		50-54			Satisfactory" - is given to a student who has made significant errors in the performance of tasks, who does not have the necessary knowledge to eliminate them
FX	0,5	2	25-49	Less of 50	not credited/not passed	"Unsatisfactory" - is set to a student who has not completed the task, does not have the necessary knowledge to eliminate them

F	0		0-24		"Unsatisfactory" - is set to a student who has not completed the task, does not have the necessary knowledge to eliminate them, even under the guidance of a teacher
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### Academic achievement requirements:

Attendance by students of all classroom classes without delay is mandatory.

In case of absence, classes are worked out in the order established by the dean's office.

If there are three passes, the teacher has the right not to allow the student to attend classes until the issue is administratively resolved.

If the absence of classes is more than 20.0% of the total number of classes, the student automatically enters the summer semester.

### Note to the student:

- ✓ regularly review lecture material;
- ✓ Do not be late and do not miss classes;
- ✓ work off missed classes if you have permission from the dean's office;
- ✓ Actively participate in the classroom (individually and in groups;)
- ✓ timely and fully complete homework assignments;
- ✓ submit all assignments within the time specified by the teacher;
- ✓ independently study the material in the library and at home;
- ✓ timely and accurately fulfill the tasks of the teacher, individual tasks for the IWS to achieve learning outcomes;
- ✓ to master the basic and additional literature necessary for the study of the discipline;
- ✓ performing tasks, the student should not copy or reproduce the work of other students, scientists, practitioners, plagiarism;
- ✓ develop their intellectual and oratory skills;

In case of non-compliance with the requirements of the Memo, the student will be penalized in the form of deducting points (one point for each violated item).

If the requirements of the Memo are fully met, the student is encouraged in the form of an additional 10 points to the final control in the discipline.

### Academic Integrity, Conduct and Ethics Policy:

- turn off your cell phone during class;
- Be polite;
- respect other people's opinions;
- formulate objections in the correct form;
- do not shout or raise your voice in the audience;
- independently complete all semester assignments;
- Eliminate plagiarism from your practice;

### Methodical instructions.

It is recommended to organize the time required to study the discipline as follows:

**When preparing for a practical lesson**, you must first read the abstract with the teacher's explanations.

**When performing exercises**, you must first understand what you want to do in the exercise, then proceed to its implementation.

**Literature work.** The theoretical material of the course becomes more understandable when books are studied in addition to the abstract. After studying the main topic, it is recommended to perform several exercises.

**Preparation for boundary and intermediate controls.** In preparation for the boundary and intermediate control, it is necessary to study the theory: the definitions of all concepts before understanding the material and independently do several exercises.

**Independent work of students** is organized on all studied topics of each section. Independent work is carried out in the form of:

- work in Internet sites;
- work with basic and additional literature;
- fulfillment of written assignments;
- preparation of reports, abstracts, tables and posters on