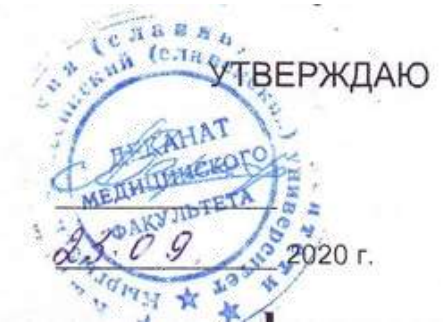
MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION, MINISTRY OF SCIENCE, HIGHER EDUCATION AND INNOVATION OF THE KYRGYZ REPUBLIC

Kyrgyz-Russian Slavic University
named after the first President of the Russian Federation B.N. Yeltsin



Occupational diseases

Work program of the discipline (module)

Assigned to the **Therapies No1 (Pediatrics and Dentistry)**

Curriculum 310501_20_6 ld in.plx
Specialty 31.05.01. - Russian Federation, 560001 - KR General Medicine (for foreign students)

Qualification **Specialist**

Form of study **Full-time**

Total labor intensity **2 ZET**

Hours according to the 72

including:

classroom classes 36

independent work 35,7

Types of control in semesters:
Credit with a grade of 8

Distribution of hours of the discipline by semesters

Semester (<Курс>.<Семестр на курсе>)	**8 (4.2)**		Total	
Weeks	18			
Type of classes	UP	WP	UP	WP
Lectures	9	9	9	9
Practical	27	27	27	27
Contact work during the period of theoretical training	0,3	0,3	0,3	0,3
Including int.	4	4	4	4
Total room.	36	36	36	36
Contact work	36,3	36,3	36,3	36,3
Himself. Work	35,7	35,7	35,7	35,7
Total	72	72	72	72

The program was compiled by:

Senior Lecturer Uvaidillaeva F.T.

Reviewer(s):

Doctor of Medical Sciences, Professor, Head of the Department of Hospital Therapy with a Course of Hematology of the KSMA, Mamatov S.M

Candidate of Medical Sciences, Associate Professor of the Department of Th .D specialty, Dzhailobaeva K.A.

Work program of the discipline

developed in accordance with the Federal State Educational Standard 3++:

Federal State Educational Standard of Higher Education in the Specialty 31.05.01 GENERAL MEDICINE
(Order of the Ministry of Education and Science of Russia dated 09.02.2016 No 95)

Compiled on the basis of the curriculum:

Specialty 31.05.01. - Russian Federation, 560001 - Kyrgyz Republic General Medicine

approved by the Academic Council of the University of ____ _____Minutes No _____

The work program was approved at the meeting of the department

Minutes of 29.08.2025 No 1
Program duration: 2025-2030 academic year.
Head. Head of the Department

Approval of the RPD for execution in the next academic year

Chairman of the International Council
__ _____ 2026

The work program was revised, discussed and approved for
in the 2026-2027 academic year at the meeting of the Department

Minutes of __ _____ 2026 № __
Head. Head of the Department

Approval of the RPD for execution in the next academic year

Chairman of the International Council
__ _____ 2027

The work program was revised, discussed and approved for
in the 2027-2028 academic year at the meeting of the Department

Minutes of __ _____ 2027 № __
Head. Head of the Department

Approval of the RPD for execution in the next academic year

Chairman of the International Council
__ _____ 2028

The work program was revised, discussed and approved for
in the 2028-2029 academic year at the meeting of the department

Minutes of __ _____ 2028 № __
Head. Head of the Department

Approval of the RPD for execution in the next academic year

Chairman of the International Council
__ _____ 2029

The work program was revised, discussed and approved for
in the 2029-2030 academic year at the meeting of the department

Minutes of __ _____ 2029 № __
Head. Head of the Department

1. OBJECTIVES OF MASTERING THE DISCIPLINE	
1.1	The purpose of the discipline "Occupational Diseases" is to form students' systematic knowledge about the causes, mechanisms of development, clinical manifestations and prevention of occupational diseases, to teach them to recognize harmful production factors and their impact on the body, to master the diagnosis and differential diagnosis of occupational pathology, the principles of treatment, rehabilitation and expertise to develop skills in the analysis of occupational risks, the application of sanitary and hygienic legislation and interdisciplinary interaction, as well as to cultivate professional responsibility for preserving the health of the working population.

2. THE PLACE OF THE DISCIPLINE IN THE STRUCTURE OF THE EDUCATIONAL PROGRAM	
Cycle (section) of the PLO:	B1.B
2.1	**Requirements for the preliminary training of the student:**
2.1.1	Anatomy
2.1.2	Pathological anatomy
2.1.3	Propaedeutics of Internal Diseases
2.1.4	Normal physiology
2.2	**Disciplines and practices for which the development of this discipline (module) is necessary as a previous:**
2.2.1	Infectious diseases
2.2.2	Immunoprophylaxis of infectious diseases
2.2.3	Hospital surgery
2.2.4	Hospital Therapy
2.2.5	Family Medicine
2.2.6	Oncology, radiation therapy
2.2.7	Phthisiology
2.2.8	Faculty Therapy

3. COMPETENCIES OF THE STUDENT FORMED AS A RESULT OF MASTERING THE DISCIPLINE (MODULE)	
PC-10: readiness to provide medical care for sudden acute diseases, conditions, exacerbation of chronic diseases that are not accompanied by a threat to the patient's life and do not require emergency medical care	
Know:	
Level 1	principles of medical care for acute diseases, conditions and exacerbations of chronic diseases that do not require emergency medical care.
Level 2	
Level 3	
Be able to:	
Level 1	to provide medical care to patients with acute diseases, conditions and exacerbations of chronic diseases within its competence.
Level 2	
Level 3	
Own:	
Level 1	skills of diagnosis, treatment and dynamic monitoring of patients in conditions not accompanied by life-threatening.
Level 2	
Level 3	

PC-8: ability to determine the tactics of management of patients with various nosological forms	
Know:	
Level 1	- Etiology, pathogenesis, clinical presentation of major diseases with various nosological forms.
Level 2	- Main types and methods of treatment of patients with various nosological forms.
Level 3	- Methods of management and treatment of patients with various nosological forms on an outpatient basis and in a day hospital

Be able to:	
Level 1	- Correctly identify this disease.
Level 2	- To compare different types and methods of treatment of patients with different nosological forms, to develop a treatment plan for diseases.
Level 3	- Manage and treat patients on an outpatient basis and in a day hospital.
Own:	
Level 1	- Skills in analyzing various types of treatment of patients with different nosological forms.
Level 2	- Methods of searching for and comparing different methods of treatment of patients with different nosological forms.
Level 3	- Skills in managing and treating patients with various diseases on an outpatient basis and in a day hospital.

PC-6: the ability to determine the patient's main pathological conditions, symptoms, disease syndromes , nosological forms in accordance with the International Statistical Classification of Diseases and Health-Related Problems, X revision	
Know:	
Level 1	the main pathological conditions, symptoms, syndromes and nosological forms of diseases in accordance with ICD-10.
Level 2	
Level 3	
Be able to:	
Level 1	determine the patient's pathological conditions, symptoms, syndromes and formulate a diagnosis in accordance with ICD-10.
Level 2	
Level 3	
Own:	
Level 1	skills in clinical diagnosis and interpretation of examination data to establish a diagnosis in accordance with ICD-10.
Level 2	
Level 3	

As a result of mastering the discipline, the student must

3.1	**Know:**
3.1.1	- Etiology, pathogenesis, clinical picture of the most common forms of occupational diseases
3.1.2	- Features of the diagnosis of occupational diseases
3.1.3	- Differential diagnosis between occupational and non-occupational diseases that have a similar clinical picture
3.1.4	- Deontological norms, ethics of the doctor in the process of supervising patients
3.1.5	- Issues of treatment, prevention, examination of working capacity, medical and labor rehabilitation of occupational diseases.
3.1.6	- Know the principles of organization and provision of emergency medical care for acute occupational diseases (poisoning)
3.2	**Be able to:**
3.2.1	- Analyze the data of the patient's professional history to determine the possible impact of occupational factors on the state of health
3.2.2	- Be able to conduct preliminary and periodic medical examinations of employees
3.2.3	- To analyze the mechanisms of action of unfavorable factors of the working environment that caused the development of occupational disease
3.2.4	- To conduct a targeted examination of patients to identify clinical signs indicating the influence of unfavorable factors of the working environment
3.2.5	- To carry out a differential diagnosis between suspected occupational and non-occupational diseases that have a similar clinical picture
3.2.6	- To identify specific features of the course of this occupational disease
3.2.7	- To determine the degree and persistence of functional disorders of the affected organs and systems

3.2.8	- Correctly recommend the necessary therapeutic measures for patients with occupational diseases
3.2.9	- Provide emergency medical care in case of acute occupational diseases (poisoning)
3.2.10	- On the basis of the clinical picture, the degree of functional disorders, working conditions, profession of the patient, to decide on his ability to work and employment.
3.3	**Own:**
3.3.1	- skills of clinical examination, diagnosis and treatment of patients with occupational diseases, in carrying out rehabilitation, preventive measures, including preliminary and periodic medical examinations, mechanisms and localization of action and the possibility of substitution with drugs from other groups;
3.3.2	- skills of analysis and use of data on sanitary and hygienic conditions at the workplace to substantiate the connection between the disease and the working conditions of the patient;
3.3.3	- skills in determining the degree of disability in occupational diseases and intoxications,
3.3.4	selection of rational types of work for occupational patients whose ability to work is limited;
3.3.5	- skills of filling out the act of examination of the patient's VTEK with the justification of the expert opinion;
3.3.6	- skills in conducting a targeted examination of workers in industrial enterprises, agriculture , transport and construction to identify their occupational disease.

4. STRUCTURE AND CONTENT OF THE DISCIPLINE (MODULE)

Lesson code	Name of sections and topics /type of lesson/	Semester / Course	Hours	The competence	References	Inté Rakt.	Pr. podg.	Note
	Section 1. The subject of occupational pathology. Dust diseases							
1.1	Introduction to the Clinic occupational diseases and her tasks /Lek/	8	2					
1.2	Acquaintance with the clinic of occupational diseases, features of supervision, examinations patients with occupational diseases . Patient supervision. Acquaintance with the medical care of workers. Preliminary and periodic medical examinations of workers. Issues of examination of working capacity and medical examination /Pr/	8	4		L1.1 L1.2 L1.3 L1.4 L1.5			
1.3	Dust lung diseases. Pneumoconiosis /Lek/	8	2					
1.4	Pneumoconioses of dust. Silicosis. Silicotuberculosis. Silicisiderosis. Silixysilicatosis.Pneumoconiosis from weakly fibrogenic dust. Anthracosis.Asbestosis.Pneumoconi oz electric welders /Pr/	8	4			2		
1.5	Pneumoconioses from aerosols allergenic toxico. Berylliosis. Farmer's lung. Dust bronchitis.Occupational bronchial asthma /Pr/	8	4			2		

1.6	1. Influence of new factors of the production environment on the condition of the workers. 2. Modern ideas about pathogenesis of pneumoconiosis. 3. Organization and conduct of preliminary and periodic examinations of persons working in conditions of exposure to dust. 4. Criteria for etiological diagnosis of dust bronchitis. 5. Differential diagnosis asbestosis with other diseases. 6. Differential diagnosis of lead intoxication. 7. The effect of benzene and its homologues per body women and children. 8. Historical aspects study of occupational diseases. 9. Etiophysiopathogenesis, clinical presentation and treatment of chronic mercury intoxication /Wed/	8	21,7					
	Section 2. Occupational diseases from the impact of physical factors. Occupational diseases from the impact of toxicochemical factors.							
2.1	Vibration Sickness /Lek/	8	2					
2.2	Occupational diseases of the musculoskeletal system /PR/	8	5					
2.3	Lead intoxication and its compounds /Lek/	8	3					
2.4	Intoxication with lead and its compounds, mercury and its compounds, aromatic hydrocarbons /Pr/	8	5					
2.5	Intoxication with irritating substances. Occupational intoxications Basic principles diagnostics and emergency medical assistance in acute occupational intoxications /Pr/	8	5					

2.6	1. The modern idea of pathogenesis of vibrational diseases. 2. Differential diagnosis of occupational vibration disease. 3. Intoxication with irritating substances. 4. Occupational intoxications pesticides. 5. Basic principles of diagnosis in acute occupational intoxications. 6. Basic principles of emergency medical care for acute occupational intoxications.	8	14					
2.7	Submission and defense of the medical history	8	0,3					

5. FUND OF ASSESSMENT TOOLS

5.1. Control questions and tasks

Questions to check the level of learning KNOW:
1. The main types of labor activity and duties of a shop doctor.
2. On the basis of what documents are mandatory preliminary and periodic medical examinations of workers exposed to harmful and unfavorable working conditions carried out? Summary of annexes to this document.
3. Which diseases are occupational and which are occupational injuries?
4. Documentation necessary to resolve the issue of the connection between the disease and the work performed (occupational disease).
7. Which medical and preventive institutions are given the right to initially establish the diagnosis of chronic and acute occupational diseases (intoxications)?
8. The purpose of preliminary (upon employment) and periodic medical examinations.
9. What directive documents (name and content) should be followed when organizing and conducting preventive medical examinations of workers exposed to harmful factors of the working environment?
10. What criteria should be used to assess the quality of preventive medical examinations?
11. List individual treatment, prevention and rehabilitation measures prescribed for an occupational disease or if it is suspected.
12. Name the collective therapeutic and preventive sanitary and hygienic measures that need to be carried out based on the results of preventive examinations.
13. The concept of working ability and types of its impairment.
14. The main tasks of VTE in the clinic of occupational diseases.
15. Benefits for persons with occupational diseases and intoxications.
16. The concept of a recourse claim in occupational diseases.
17. The concept of temporary disability and indications for its establishment.
18. The concept of a sick leave certificate, indications for its issuance and the maximum period of continuation.
19. The main functions of the VTEK.
20. The concept of disability group and criteria for their determination.
21Terms of re-examination of disabled persons I, II and III. In their cases, the disability group is established without specifying the period of re-examination?
22. What cases of re-examination of disabled people are carried out in a shorter time?
23. Measures for the social, labor and medical rehabilitation of patients with occupational diseases.
24. What circumstances should be taken into account for the rational employment of patients with occupational diseases?
25. The importance of concomitant non-occupational diseases in determining the groups of disability in persons with occupational diseases.
26. In what areas of production are workers exposed to dust factors?
27. What properties of dust particles determine their fibrogenic effect? Which types of dust have the highest fibrogenic activity?
28. What factors of the working environment and characteristics of the body determine the rate of development and progression

silicosis?
29. Basic theories of the pathogenesis of silicosis.
30. Describe the morphological structure of the silicotic nodule.
31. What complaints and objective data are characteristic of uncomplicated silicosis?
32. The main X-ray signs of silicosis.
33. List the main indicators of the function of external respiration and the nature of their changes in silicosis.
34. List the most common complications of silicosis and give their characteristics (on the basis of
clinical, radiological, laboratory data).
35. What variants of the course of silicosis do you know?
36. What are the principles of the classification of pneumoconioses in our country?
37. With what occupational diseases is the differential diagnosis of silicosis carried out?
38. What are the basic principles of silicosis treatment? Why can't the irreversibility of far-reaching morphological changes
justify the refusal of treatment?
39. Name the medical and physiotherapeutic methods of treating silicosis and its complications.
40. The main criteria for determining the working capacity of patients with silicosis.
41. What is the difference between the clinical picture of silicatoses and silicosis?
42. What is the difference between the clinical picture of carboconiasis and silicosis?
43. What is the difference between the clinical picture of metalloconiosis and silicosis?
44. What are the features of the clinical picture of pneumoconiosis caused by exposure to organic dust?
45. What clinical forms of occupational diseases can be observed when exposed to
electric welding aerosol?
46. In what industries and professions are workers exposed to dust factors?
47. What properties of industrial dust determine its ability to cause chronic dust bronchitis?
48. List the complaints characteristic of patients with chronic dust bronchitis. Are there any complaints?
specific to dust bronchitis?
49. What are the objective symptoms of chronic dust bronchitis? Are there any specific ones among them?
50. Provide data on the main instrumental methods of research used to diagnose dust
bronchitis.
51. List the criteria for the etiological diagnosis of chronic dust bronchitis (substantiate the relationship of the disease with
exposure to industrial dust).
52. List the principles of treatment of patients with chronic dust bronchitis.
53. What are the rules of VTE for chronic dust bronchitis?
54. What are the directions of technical, sanitary, hygienic and medical prevention of dust bronchitis?
55. How do you imagine the role of an occupational health doctor in establishing a connection between chronic bronchitis and the
profession and in the
development and implementation of preventive measures?
56. What unfavorable production factors can cause the development of occupational bronchial asthma?
Give examples of substances that have sensitizing, irritating and combined effects.
57. What is the clinical picture of bronchial asthma of mild, moderate and severe degrees?
58. List the main indicators of the function of external respiration and describe the nature of their changes in bronchial
asthma.
59. The totality of what data provides the basis for the diagnosis of bronchial asthma of occupational origin?
60. What is the difference in the prognosis for occupational bronchial asthma in each case?
61. What are the basic principles of bronchial asthma treatment?
62. The main industries and technological processes in which berylliosis can occur.
63. Which beryllium compounds are the most toxic?
64. Pathogenesis of berylliosis. Ways of penetration of beryllium and its compounds into the body and ways of excretion. Influence of
beryllium content in the air of working premises on the course and severity of clinical manifestations of the disease.
65. What beryllium compounds cause acute intoxication? List the clinical syndromes of acute
beryllium intoxication.
66. Chronic berylliosis: main clinical syndromes, extrapulmonary lesions, features
of gas exchange disorders.
67. X-ray picture of lung lesions in stages I, II and III of chronic berylliosis.
68. Basic therapeutic and preventive measures for berylliosis.
69. Issues of VTE in occupational diseases.
70. List the industries in which vibration is a factor of occupational hazard.
71.Name the main occupational groups of workers who may be exposed to
72. Name the main vibration parameters. What is their importance in the development of the disease?
73. What factors contribute to the development of vibration disease?
74. Describe the classification of vibration sickness.
75. What are the main clinical syndromes in vibration sickness in those working with hand-held mechanized
tools?
76. Characterize the clinical syndromes of vibration sickness that develops from the impact of general vibration.
77. What are the features of the clinical manifestations of the early stages of vibration disease?
78. Describe the functional methods of diagnosing vibration sickness.
79. Describe the differential diagnosis of vibration sickness.
80. What are the main methods of treatment and features of medical and labor expertise in vibration disease?
81. List the main measures of medical and hygienic prevention of vibration disease.
82. What is the role of the hygienist in establishing the connection between the disease and the profession and carrying out activities,

aimed at preventing the development of vibration disease and restoring the ability to work?
83. Describe the conditions that may be the cause of occupational diseases of the musculoskeletal system. List the approximate professions in which they can occur.
84. What are the causes of autonomic polyneuropathy of an occupational nature?
85. Carry out a differential diagnosis of occupational vegetative polyneuropathy.
86. Describe the clinical picture of scapulohumeral periarthritis, methods of treatment and medical and labor expertise.
87. What is the diagnostic value of X-ray examinations in this disease?
88. Tell us about the pathogenesis of epicondylitis, make a differential diagnosis with arthritis and arthrosis of the elbow joint.
89. Describe the symptoms of Dawourn, Thomsen, Welsch, Elkin, Finkelstein. What diseases are they characteristic of?
90. Tell us about the clinical symptoms of occupational myositis, methods of their diagnosis. How are the issues of disability resolved ?
91. Describe the clinical picture of Dequervain's disease.
92. What are the clinics and methods of treatment of a "snapping" finger?
93. Name the main industries and occupational groups of workers who may be adversely exposed to lead compounds.
94. List the ways of entry of lead into the body.
95. What are the main pathogenetic mechanisms of the development of lead intoxication?
96. Describe the current classification of chronic lead intoxication.
97. List the main clinical symptoms and syndromes of lead intoxication caused by inorganic and organic lead compounds.
98. Give the criteria for the differential diagnosis of lead intoxication.
99. Describe the main methods of treatment and features of VTE in chronic lead intoxication.
100.What is the role of the hygienist and occupational pathologist in establishing the connection between the disease and the working conditions of the patient and carrying out preventive measures aimed at preventing lead intoxication, as well as restoring the patient's ability to work? 33.List industries and professions in which aromatic hydrocarbons are unfavorable production factors.
101. Describe the routes of entry, metabolism and excretion of benzene and its homologues from the body.
102. What organs and systems are affected by aromatic hydrocarbons? What do you know about pathogenetic mechanisms of intoxication?
103. Describe the clinical picture of acute intoxication.
104. What qualitative and quantitative changes in peripheral blood are characteristic of intoxication with aromatic hydrocarbons?
105. What neurological syndromes are observed in the clinic of intoxication with aromatic hydrocarbons?
106. What therapeutic and preventive measures are taken in chronic intoxication with benzene and its homologues?
107. How are the issues of examination of working capacity for this disease resolved?
108. Name the industries where contact with mercury and its inorganic compounds is possible,
109. What additional unfavorable occupational factors can contribute to the development of mercury intoxication?
110. Routes of mercury intake into the body and their role in the development of intoxication.
111. In which organs is mercury deposited?
112. The main ways of excretion of mercury from the body.
113.What is meant by "carrying" mercury and can it be considered a disease?
114. What are the cardinal symptoms of micromercurialism and classical mercury intoxication?
115. What is the modern classification of chronic mercury intoxication?
116. What organs and systems are affected by chronic mercury intoxication? List the main clinical syndromes of the disease.
117.Name the main methods of functional and laboratory diagnostics that allow you to judge the degree of severity of chronic mercury intoxication.
118. Name the methods of treatment of mercury intoxication.
119. What is the scheme of administration of unitiol in acute and chronic mercury intoxication?
120.What are the most effective methods of preventing mercurialism?
121.List the medical contraindications that prevent employment in contact with mercury. What is demercurialization?
122. List the main toxic substances of irritant action and
Determine the role of their physical properties in the development of respiratory lesions.
123. Describe your ideas about the pathogenesis of respiratory lesions of toxic-chemical etiology.
124. What are the main clinical forms of respiratory lesions of toxic-chemical etiology?
125. Describe the clinical picture of poisoning with chlorine and its compounds.
126. What is the clinical picture of sulfur dioxide intoxication?
127. Describe the clinical picture of hydrogen sulfide poisoning.
128. What is the clinical picture of nitrogen oxide poisoning?
129. What are the principles of emergency care for acute toxic injuries of the respiratory system?
130. Describe a set of therapeutic measures for chronic respiratory diseases of toxic and chemical etiology.
131. How is the examination of the ability to work carried out in case of respiratory lesions of toxic-chemical etiology?

132. Prevention of respiratory injuries by irritating substances.
133.List the main work processes in which agricultural workers may be exposed to pesticides.
134. Name the pesticides that are most common in modern agriculture, and give their classification.
135. What are the main ways of entry of pesticides into the body?
136. What is the pathogenesis of chronic intoxication with pesticides of various chemical structures?
137. Describe the clinical picture of intoxication with organochlorine and mercury pesticides.
138. What is the clinical picture of intoxication with organophosphate pesticides?
139. Make a differential diagnosis between acute and chronic intoxication with toxic chemicals.
140. What are the main methods of laboratory and functional diagnosis of chronic intoxication with toxic chemicals?
141. What are the principles of antidote therapy for intoxication with pesticides of various chemical structures?
142. Describe your ideas about the basic principles of VTE in occupational intoxication with toxic chemicals.
List the methods of prevention of intoxication with pesticides in agriculture
143. Name the causes of acute intoxication in production conditions.
144. List the main ways of penetration of industrial poisons into the body.
145. Give a classification of acute occupational poisoning.
146.List the basic principles of diagnosing acute occupational poisoning.
147. Describe the clinical symptoms of acute intoxication with carbon monoxide.
148. Characterize the clinical symptoms of acute occupational intoxications with aromatic hydrocarbons.
149.Describe the clinical signs of acute occupational pesticide intoxication.
150. Name the special clinical and laboratory methods of research used in the diagnosis of the most common acute occupational intoxications.
151.Tell us about the basic principles of emergency medical care and treatment of acute occupational intoxications.
152.What is the role of the occupational health physician in establishing the diagnosis and implementing the measures aimed at preventing acute occupational poisoning and preserving the health of workers?
Tasks to check the level of learning to BE ABLE AND POSSESS are checked by solving situational problems.

5.2. Topics of term papers (projects)

not provided

5.3. Fund of Assessment Tools

1. Current control:
- oral surveys,
- tests,
- solving clinical problems,
- Supervision of thematic patients,
- practical tasks.

2. Boundary control / modular control:
- written tests,
- solving situational problems,
- analysis of medical history,
- case study (analysis of clinical cases).

3. Examination control:
- practical part (at the bedside / simulator).
- oral part (answering questions on the ticket, analysis of the clinical task, interpretation of laboratory and instrumental methods).

5.4. List of types of assessment tools

1. Current control:
- oral surveys,
- tests,
- solving clinical problems,
- Supervision of thematic patients,
- practical tasks.

2. Boundary control / modular control:
- written tests,
- solving situational problems,
- analysis of medical history,
- case study (analysis of clinical cases).

3. Examination control:
- practical part (at the bedside / simulator).
- oral part (answering questions on the ticket, analysis of the clinical task, interpretation of laboratory and instrumental

6. EDUCATIONAL, METHODOLOGICAL AND INFORMATION SUPPORT OF THE DISCIPLINE (MODULE)

6.1. Recommended Literature

6.1.1. References

	Authors, compilers	Title	Publisher, year
L1.1	Karapata P.P. Kiev, 1986	Occupational dust lung diseases.	
L1.2	Ordobaev B.S., Shabikova G.A.	Life Safety: A Textbook	DCMU 2016
L1.3	Artamonova V.G., Mukhin N.A.	Occupational Diseases: Textbook	Moscow, Meditsina Publ., 2004
L1.4	Idirisov A.N., Ismailov A.A., Nurseitov T.A., Sartov N.M., Maliev Kh.A.	Life Safety: Educational and Methodological Manual	Bishkek: KSMA 2014
L1.5	V.V. Kosarev, V.S. Lotkov, S. A. Babakov	Occupational Diseases : Occupational Diseases	GEOTAR – Media 2008

6.3. List of Information and Educational Technologies

6.3.1 Competency-Oriented Educational Technologies

6.3.1.1	Traditional educational technologies are lectures, seminars, focused primarily on communication. Lecture material is provided to students using multimedia equipment and periodic presentation of thematic patients. Use of wards, study rooms for students' work. Model tables for various diseases of the respiratory, cardiovascular, digestive, urinary and musculoskeletal systems. A multimedia system and a computer of knowledge and methods of action that are passed on to students in a ready-made form and are intended for the reproducing assimilation and analysis of specific samples.
6.3.1.2	Innovative educational technologies form systematic thinking and the ability to generate ideas when solving various situational problems. These include situational tasks, role-playing games, work in small groups, scientific and practical conferences.
6.3.1.3	Information educational technologies are the independent use of computer equipment and Internet resources by a student to perform practical tasks and independent work. For better assimilation of the material and independent work, students prepare essays, reports and presentations.

6.3.2 List of information reference systems and software

6.3.2.1	Information system "Single Window of Access to Educational Resources" (http://window.edu.ru/)
6.3.2.2	http://meduniver.com/Medical/Book/34.html
6.3.2.3	www.jaypeebrothers.com
6.3.2.4	www.booksmed.com
6.3.2.5	The R.A.L.E. Repository: Respiratory sounds: http://www.rale.ca/Recordings.htm
6.3.2.6	David Arnall: Pulmonary Breath Sounds:
6.3.2.7	http://www.med-edu.ru/articles
6.3.2.8	http://medvuz.info/
6.3.2.9	"Electronic Library" of the KRSU (www.lib.krsu.kg)
6.3.2.10	BlaufussMultimedia:http://www.blaufuss.org http://faculty.etsu.edu/arnall/www/public_html/heartlung/breathsounds/contents.html
6.3.2.11	www.bankknig.com
6.3.2.12	Frontiers in Bioscience, Virtual Library: Heart Sounds http://www.lf2.cuni.cz/Projekty/interna/heart_sounds/h14/sound.html
6.3.2.13	McGillUniversity:HeartSounds:http://www.lf2.cuni.cz/Projekty/interna/heart_sounds/h6/heart_tables.html
6.3.2.14	http://webmed.irkutsk.ru/pulm.htm
6.3.2.15	Electronic library system "ZNANIUM.COM"
6.3.2.16	Information system "Single Window of Access to Educational Resources" (http://window.edu.ru/)

6.3.2.17	http://www.med-edu.ru/articles
6.3.2.18	http://medulka.ru/vnutrennie-bolezni/books-page/1

7. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE (MODULE)	
7.1	The discipline is taught on the basis of: City Clinical Hospital No1 (tertiary level medical institution). It has 9 specialized departments, 4 of which are therapeutic (departments of cardiology, rheumatology, endocrinology, emergency therapy). There are 8 standard equipped classrooms with 100 seats , with a total area of 200 sq.m. (block of desks, couches, blackboards).
7.2	The department is equipped with a multimedia complex (laptop, personal computer, projector). Students have access to information stands (4 pcs.), an electronic library (30 textbooks), a database of clinical material (ECG, test kits, X-ray films).

8. METHODICAL INSTRUCTIONS FOR STUDENTS ON MASTERING THE DISCIPLINE (MODULE)

RECOMMENDATIONS FOR THE ORGANIZATION OF INDEPENDENT WORK OF THE STUDENT
Time management.
Recommended time allocation:
studying the notes on the day of the lecture - 10-15 minutes;
repeating the notes before the next lecture – 10-15 minutes;
study of theoretical material from the textbook – 1 hour per week;
preparation for a practical lesson – 2 hours.
Total: 3 hours 30 minutes per week.
Sequence of actions for high-quality assimilation of the material:
after the lecture, review and think over the notes (10-15 minutes);
before the next lecture, repeat the previous one and suggest a new topic (10-15 minutes);
allocate 1 hour weekly for work with literature;
to study key concepts and approaches in preparation for practical classes;
when solving problems, determine the requirements, choose theoretical material and draw up a plan for implementation.
Use of the educational and methodological complex:
It is recommended to rely on the teacher's guidelines and lectures.

Work with literature:
The material becomes more understandable with a combination of lectures, notes and textbooks.
It is recommended to do the exercises after studying each paragraph and ask yourself the following questions:
What is the paragraph about?
What new concepts have been introduced?
What is the practical significance?

Making up for missed classes:
Assimilation control is carried out systematically and is reflected in the journal.
unsatisfactory grades must be worked out at an individual interview;
a lecture missed without a valid reason is worked out by oral questioning or essay within a month;
practical exercises missed without a valid reason are mandatory;
working out takes place according to the schedule of the department;
missed classes must be worked out within 10 days;
in case of a valid reason – working on thematic material without taking into account hours;
absences due to a long-term illness - according to an individual schedule;
In some cases (conferences, competitions, etc.), students may be exempted from part of the work-offs.

RECOMMENDATIONS FOR PREPARING A PRESENTATION
Multimedia presentation is a form of independent work of students to create visual information material using the PowerPoint program. The work requires the skills of searching, systematizing and formatting information.
Requirements:
The topic is chosen by the student from the list of FOS, agreed with the teacher and must correspond to the topic of the lesson.

Stages of presentation preparation:
drawing up a plan (goals, objectives);
Thinking through each slide:
• how it reveals the main idea;
• what content will be presented;
• what will be said orally;
• How the transition will be made.

Making a presentation:
slides should be verified in fonts and indents;
the title slide must be designed correctly;
the number of slides is no more than 30;
the use of figures, graphs, tables, formulas is encouraged;
the slide gives formal information, orally – its meaning;
switching speed: 1-2 minutes per slide;
when explaining tables, indicate what the rows and columns mean;
to avoid errors, it is recommended to type formulas in a Word object;
the main font is Arial or similar;
Formulas should have the same font size as the text.
The student is obliged to make a report at the set time.
Instructions for speakers:
communicate new information;
use technical means;
be well versed in the topic;
answer questions;
comply with the time limit: report – 10 minutes, discussion – 5 minutes.
Structure of the speech:
introduction (title, idea, relevance, questions);
the main part (revealing the essence of the topic, the use of visualization);
conclusion (brief conclusions).

RECOMMENDATIONS FOR WRITING AN ESSAY
The topic is chosen in agreement with the teacher. The abstract should reflect the scientific and social aspects of the problem, contain theoretical provisions and specific examples, and be based on several sources.

Additional literature: monographs, articles, popular science magazines ("Pediatric Surgery", "Bulletin of KRSU", "Health Care of Kyrgyzstan", "Bulletin of KSMA", etc.).
The outline of the abstract must be the author's. All borrowings must be accompanied by references. Quotations must be made in quotation marks indicating the source and page.
Design:
A4 format;
title page (name of the university, discipline, topic, surname of the student, group, year, city);
Table of contents;
text divided into chapters and subchapters;
use of graphs, tables, diagrams;
sections "Conclusion" and "References".
Example of bibliographic references:
Author: I.O. Title of the book. — Place of publication: Publisher, Year. - Number of pages.
Author I.O. Title of the article // Title of the journal. — A year. — Tom, No. — Pages.
Author I.O. Title of the article / Title of the collection. — Place of publication: Publisher, Year.