



Educational Institution
"Royal Metropolitan university"

Quality Management System
Syllabus of the discipline "Occupational diseases"
Specialty 560001 "General Medicine" EI "RMU"

**Ministry of education and science of Kyrgyz Republic
EI "Royal Metropolitan University"
Department of "Clinical disciplines"**



SYLLABUS

**by discipline "Occupational diseases"
for students of specialty 560001 "General medicine"**

Form of study	full-time
Course	3
Semester	6
Credit	5
Total credits according to the curriculum	5
Total hours according to the curriculum	150
Lectures	36
Practical classes	54
Independent work	60

Syllabus developers:
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Reviewed and approved at a meeting of the
department of "Clinical disciplines"
Protocol No 1 from "9" 09 2024
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(signature)

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Name and complexity of the discipline

Course	Semester	Number of weeks	Number of academic hours		Number of hours for independent work		Total hours	Number of modules
			Lectures	Practical classes	SIW	SIWT		
3	6	18	36	54	30	30	150	2

Annotation of Academic discipline

Occupational diseases are one of the branches of clinical medicine that studies various aspects of occupational diseases caused by the impact of various unfavorable factors of the production environment on the body of workers. In our country, millions of people are employed in production: in industry, agriculture, transport, etc. Studying the basics of occupational pathology is important in the process of training a physician and is provided for in the curriculum.

The purpose of discipline:

The goal of mastering the academic discipline "Occupational diseases" is to develop knowledge on general issues of occupational pathology, medical and social expertise and rehabilitation.

Learning objectives:

- Study of current legislative and regulatory documents on occupational pathology, legal framework for protecting workers' health.
- To develop skills and abilities in assessing the relationship between a disease and a profession, in assessing professional risks and the possibilities of managing them.
- To develop skills and abilities in conducting preliminary and periodic medical professional suitability assessments.
- Preparation of students for examinations of workers, independent examination of professional preventive activities.

After mastering this discipline, the student

will know:

- etiology, pathogenesis, clinical picture of the most common forms of occupational diseases - features of diagnostics of occupational diseases
- issues of treatment, prevention, assessment of working capacity, medical and labor rehabilitation of occupational diseases.
- know the principles of organizing and providing emergency medical care for acute occupational diseases (poisoning)

will understand:

- differential diagnosis between occupational and non-occupational diseases with similar clinical picture - deontological norms, ethics of the doctor in the process of patient care will be able to:
- conduct preliminary medical examinations of employees upon admission to work and periodic medical examinations
- conduct targeted examination of patients to identify clinical signs indicating the influence of unfavorable factors in the working environment
- identify specific features of the course of a given occupational disease
- determine the degree and persistence of functional disorders of affected organs and systems
- correctly recommend the necessary treatment measures for patients with occupational diseases
- provide emergency medical care in case of acute occupational diseases (poisoning)
- will be able to use:
- differential diagnostics between suspected occupational and non-occupational diseases that have a similar clinical picture
- based on the clinical picture, degree of functional impairment, working conditions, and profession of the patient, decide on issues of his ability to work and employment.
- will be able to analyze:
- mechanisms of action of unfavorable factors of the working environment that caused the development of occupational disease
- data from the patient's professional anamnesis to determine the possible influence of production factors on health
- the goals and significance of patient examination methods and their appointment taking into account indications and contraindications.

Contents of the academic discipline

No.	Name sections and topics disciplines (lectures and practical classes)	Audiory lessons		Total hours for classroom	SIWT	Student's independent work	Used educational technologies, methods and methods of teaching	No.	Forms of current and border control academic performance
		lectures	practical classes						
1	Introduction. Subject of occupational diseases. Definition. Objective and tasks of the subject. Classification	2	4	6	2	2	PC-1, PC-2	lecture visualization, lesson conference,	small group method (SG)
2	Pneumoconiosis	2	4	6	2	2	PC-1, PC-2	lecture visualization, lesson conference, CBL	R – writing and defending an abstract,
3	Chronic dust bronchitis. Occupational bronchial asthma	2	4	6	2	2	PC-1, PC-2	lecture visualization, lesson conference, CBL	small group method (SG) R – writing and defending an abstract, C - Interview on control questions
4	Vibration disease. Occupational hearing loss (cochlear neuritis)	2	4	6	2	2	PC-3, PC-6, PC-8	lecture visualization, lesson conference, CBL	preparation and defense of abstracts
5	Diseases caused by exposure to laser radiation, infrasound and ultrasound	2	4	6	2	2	PC-3, PC-6, PC-8	lecture visualization, lesson conference, CBL	small group method (SG)
6	Benzene intoxication. Chlorine organochlorine intoxication.	2	4	6	2	2	PC-3, PC-6, PC-8	lecture visualization, lesson conference	R – writing and defending an abstract,

								<i>ence, CBL</i>	
7	Diseases caused by antibiotics	2	4	6	2	2	PC-3, PC-6, PC-8	<i>lecture visualization, lesson conference, CBL</i>	<i>C - Interview on control questions</i>
8	Diseases of the musculoskeletal system	2	4	6	2	2	PC-3, PC-6, PC-8	<i>lecture visualization, lesson conference, CBL</i>	<i>KP – test paper, K3 – test assignment,</i>
9	Occupational disease of health workers	2	4	6	2	2	PC-3, PC-6, PC-8	<i>lecture visualization, lesson conference, CBL</i>	<i>R – writing and defending an abstract, C – interview on control questions, D – report preparation. Testing</i>
	Total hours for the discipline	18	36	54	18	18			Exam

Methodological recommendations for practical exercises.

Practical classes are held after lectures and are explanatory, generalizing and consolidating character. They can be carried out not only in the classroom, but also outside the educational institution.

During practical classes, students perceive and comprehend new educational material. Practical classes are systematic, regularly following each lecture or two or three lectures.

Practical classes are carried out according to the schedule of the educational process and independent work of students in the disciplines.

When preparing for practical classes, it is necessary to study in advance the methodological recommendations for its implementation. Pay attention to the purpose of the lesson, the main questions to prepare for the lesson, and the content of the topic of the lesson.

Before each practical lesson, the student studies the practical lesson plan with a list of topics and questions, a list of literature and homework on the material presented for the practical lesson. The following scheme of preparation for the seminar lesson is recommended for the student:

1. work through lecture notes;
2. read the basic and additional literature recommended for the section being studied;
3. answer questions from the practical lesson plan;

4. study the topic and select literature for writing abstracts, reports, etc.

Plan for organizing student's independent work

No.	Topic of the student's independent work:	Assignment for independent work	Recommended literature	Deadlines surrender (week number)
1	Diseases caused by the impact of high temperatures of the industrial environment on the human body	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor). 2011.	2
2	Diseases caused by the action of substances with predominant damage to the hematopoietic system	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor). 2011.	2
3	Diseases caused by the action of substances with predominant damage to the kidneys and urinary tract	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor). 2011.	3
4	Intoxication with arsenic-containing compounds	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor). 2011.	4
5	Coordination neuroses	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor). 2011.	5
6	Diseases caused by the action of substances with predominant damage to the nervous system	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor). 2011.	6
7	Diseases caused by agricultural pesticides	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor). 2011.	7
8	Arsenic Hydrogen Intoxication	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David	8

			Koh (Editor), Ken Takahashi (Editor). 2011.	
9	Diseases caused by the action of substances with predominant damage to the hepatobiliary system	Abstract, presentation	1.Occupational Diseases. 2nd edition / VA Kapustnik, IF Kostyuk. 2018. 2.Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor). 2011.	8

Methodological recommendations for preparing independent work

The following types of independent work of students are used:

- studying theoretical material from lecture notes and recommended textbooks, educational literature, reference sources;
- independent study of some theoretical issues not covered in lectures, writing abstracts, preparing presentations;

Students are invited to read and meaningfully analyze monographs and scientific articles on obstetrics and gynecology. The results of working with texts are discussed in practical classes.

To develop independent work skills, students must complete assignments, independently turning to educational, reference and scientific-methodological literature. Testing the completion of assignments is carried out both in practical classes with the help of students' oral presentations and their collective discussion, and with the help of written independent work.

An abstract is a brief written summary of the content of a scientific work on a given topic. This is an independent research work where the student reveals the essence of the problem under study with elements of analysis on the topic of the essay.

Presents various points of view, as well as his own views on the problems of the topic of the essay. The content of the abstract should be logical, the presentation of the material should be of a problem-thematic nature.

Requirements for writing an abstract:

The volume of the abstract can range from 9-10 printed or handwritten pages.

Main sections: table of contents (outline), introduction, main content, conclusion, bibliography.

The text of the abstract must contain the following sections:

- title page indicating: name of the university, department, topic of the abstract, full name of the author and full name of the teacher

–introduction, relevance of the topic

–main section

–conclusion (analysis of literature search results)

conclusions

–the list of references must have at least 10 bibliographic titles, including network resources.

The text part of the abstract is drawn up on a sheet of paper in the following format:

–top margin – 2 cm; left indent – 3 cm; indentation on the right – 1.5 cm; bottom indent – 2.5 cm;

–text font: Times New Roman, font height – 14, space – 1.5;

–Page numbering is at the bottom of the sheet. There is no number on the first page. The abstract must be completed competently in compliance with the culture of presentation. There must be references to the literature used, including periodical literature for the last 5 years.

Abstract evaluation criteria:

–Relevance of the research topic;

–relevance of the content to the topic;

–depth of material elaboration;

–correctness and completeness of development of the questions posed;

–the significance of the findings for further practical activities;

–correctness and completeness of use of literature;

–compliance of the abstract design with the standard;

–the quality of the message and answers to questions when defending the abstract.

A report is a type of brief but informative message about the essence of the issue under consideration, various opinions about the subject being studied. In some cases, it is allowed to present the author's own point of view within the framework of thematic issues.

Requirements for the report:

The volume should not exceed five printed pages.

A quality report has four main structural elements:

1) introduction;

2) introduction (at this stage the speaker must interest the audience, formulate the relevance and novelty of the research, emphasize the importance and purpose of the work performed);

3) the main part (it talks about the research methods used, the work done, and analyzes the results obtained); 4) conclusion (summarizing the results of the work).

The text part of the report is drawn up on a sheet of the following format:

–top margin – 2 cm; left indent – 3 cm; indentation on the right – 1.5 cm; bottom indent – 2.5 cm;

–text font: Times New Roman, font height – 14, space – 1.5;

–Page numbering is at the bottom of the sheet. There is no number on the first page.

Criteria for evaluation:

- timeliness of submission;

- compliance with the requirements;

- depth of material elaboration;

- relevance of the content to the topic;

- correctness and completeness of use of the source.

List of basic and additional literature

Basic literature

Authors	Year of publication
Basic	
1. Occupational Diseases. 2nd edition / V. A. Kapustnik, I. F. Kostyuk.	2018;
2. Textbook of Occupational Medicine Practice Hardcover /David Koh (Editor), Ken Takahashi (Editor).	2011

Monitoring and evaluation of learning outcomes

Each module is assessed using a 100-point system. Maximum score 100.

A student is allowed to take the final test if he has a total score in discipline 60 or more points.

Scoring Criteria	Module 1	Module 2
Classroom work (activity in discussions, oral questioning, work in groups, etc.)	40 points	40 points
Independent work: abstract, report	20 points	20 points
Total for the module (testing, situational task)	40 points	40 points
Total for the discipline:	100 points	100 points

Evaluation criteria:

Criteria for assessing the practical lesson:

- an *“excellent” grade* is given to a student if he has knowledge of the discipline in the full scope of the program and comprehends the discipline deeply enough; independently, in a logical sequence and exhaustively answers all questions, emphasizing the most essential, is able to analyze, compare, classify, generalize, concretize and systematize the studied material, highlight the main thing in it;

- *“good” rating*: the student has knowledge of the discipline almost in full of the program (there are knowledge gaps only in some sections); independently and partly with leading questions, gives complete answers to the ticket questions; does not always highlight the most significant, but at the same time does not make serious mistakes in the answers;

- a *“satisfactory” grade* is given in cases where the student has the basic body of knowledge in the discipline; shows difficulty in answering independently, uses imprecise formulations; in the process of answering, errors are made regarding the substance of the questions;

- an *“unsatisfactory” grade* is given in cases where the student has not mastered the required minimum knowledge of the subject and is unable to answer the questions on the ticket even with additional leading questions from the teacher.

Criteria for assessing practical skills:

- The *“excellent” rating* is given when all stages of the obstetric and gynecological examination are carried out thoroughly and systematically. Having clear and professional communication with the patient during the examination. The student has a thorough understanding of the obstetric and gynecological aspects being studied, including the analysis of specific symptoms and their interpretation.

- A “good” rating is given when the basic steps of an obstetric and gynecological examination are competently performed, and effective interaction with the patient ensures understanding and trust. With the ability to identify the main symptoms and conduct appropriate analysis.
- A “satisfactory” rating is given when performing the main stages of an obstetric and gynecological examination, but with some shortcomings, with some misunderstandings or failures in communication with the patient. With basic knowledge of symptoms and their interpretation.
- An “unsatisfactory” grade is given if the student makes serious errors or omissions in conducting an obstetric-gynecological examination, as well as if there are problems in communication that may cause difficulty or even dissatisfaction in the patient during the examination.

Criteria for assessing abstracts:

- an “excellent” grade is given to the student if the topic of the essay is fully covered, excellent mastery of the material is demonstrated, the appropriate sources are used in the right quantity, the structure of the work corresponds to the assigned tasks, the degree of independence of the work is high;
- a “good” grade is given to the student if the topic of the essay is basically covered, good mastery of the material is demonstrated, appropriate sources are used, the structure of the work basically corresponds to the assigned tasks, the degree of independence is average;
- a “satisfactory” grade is given to the student if the topic of the essay is poorly covered, satisfactory mastery of the material is demonstrated, the sources used and the structure of the work partially correspond to the assigned tasks, the degree of independence of the work is low;
- an “unsatisfactory” grade is given to the student if the topic of the essay is not covered, poor mastery of the material is demonstrated, the sources used are insufficient, the structure of the work does not correspond to the assigned tasks, the work is not independent.

Project evaluation criteria:

- A grade of “excellent” is given to students if the project demonstrates outstanding depth of research into obstetrics and gynecology issues and aspects of the topic, presenting innovative research approaches. Effective public education emphasizes creativity and originality of the project, as well as active community involvement. The organization and structure of the project is highly organized, logically structured, ideas are clearly and professionally expressed
- a “good” grade is given to students if the project demonstrates a good depth of research into obstetric and gynecological issues and aspects, supported by specific facts and data. The effectiveness of education is significant, but there is room for further improvement. The presence of creative elements gives the project originality, but some aspects may require additional development. Community involvement is positive but can be more intense. The organization and structure of the project is generally good, but some areas may require improvement.

- a *“satisfactory”* grade is given to students if the project meets the minimum requirements for the study of obstetric and gynecological issues and aspects, but needs additional development. The effectiveness of education is at a basic level and the project can be improved in this area. The project contains elements of creativity, but they can be supplemented and deepened. Community involvement could be more active. The organization and structure of the project needs additional attention to improve clarity and consistency.

- an *“unsatisfactory”* grade is given to students; the project does not meet basic standards and does not provide sufficient depth in the study of obstetric and gynecological issues. The effectiveness of education is extremely limited, creativity and originality are lacking. Community involvement is insufficient or absent. The organization and structure of the project raise serious concerns, making it difficult to understand and disorganized.

Test evaluation criteria, MSQ:

- an *“excellent”* mark on testing is awarded to a student who provides correct, deep and clear answers, demonstrating a high level of knowledge and its practical application. Important factors are the student's ability to solve complex problems, be creative, and comply with test requirements. Criteria may vary, but the general requirement is outstanding understanding and successful application of course material (with a score of 90 or more correct answers).

- a *“good”* mark on testing is given to a student if he has demonstrated good knowledge of the subject, provided correct answers, clearly and clearly expressed his thoughts, and also successfully completed the main aspects of the test tasks. This score may also reflect the student's ability to apply acquired knowledge in various situations and effectively use the taught skills within the test tasks (with a number of correct answers from 76 to 89).

- a *“satisfactory”* test grade is assigned to a student who has demonstrated a basic understanding of the subject, provided answers that meet the minimum requirements, and successfully completed the main elements of the test. This score may indicate that the student has mastered the basics of the material, but may not have achieved a high level of depth of knowledge or was unable to cope with more complex aspects of the items (with 60 to 75 correct answers).

- an *“unsatisfactory”* mark on testing is given to a student if his knowledge of the subject is insufficient, the answers contain significant errors or do not meet the minimum requirements, and also if the student has not coped with the main aspects of the test. This assessment indicates an unsatisfactory level of mastery of the material and the inability to apply knowledge within the framework of test tasks (if he gave up to 59 correct answers inclusive).

Scale of correspondence between grades and points on the final control (exam)	
Points	Grade
90-100	"Excellent"
76-89	"Good"
60-75	"Satisfactorily"
0-59	"Unsatisfactory"

Academic discipline policy:

- compulsory attendance at classes;
- active participation of the student in practical classes;
- preliminary preparation and completion of homework;
- high-quality and timely completion of tasks SIW;
- participation in all types of control;
- one lateness to classes and/or leaving before their end for any reason is considered as one missed lesson that cannot be restored;
- unacceptable: the use of cell phones during classes, deception and plagiarism, late submission of assignments, failure to comply with chain of command and rules of conduct.

Assist:

For consultations on completing independent work (SIW/SIWT), their delivery and defense, as well as for additional information on the material covered and all other questions that arise regarding the course being taught, please contact the teacher during the hours allocated for SIWT.