

№ЛД-16 ИИ

**Federal State Budgetary Educational Institution of Higher Education
«North-Ossetia State Medical Academy»
of the Ministry of Healthcare of the Russian Federation**



Approved

Rector of FSBEI HE NOSMA

MOH Russia

O.V. Remizov

«24» May 2023

EDUCATIONAL TRAINING PROGRAM OF DISCIPLINE

«UROLOGY»

the main professional educational program of higher education - speciality program in the
speciality 31.05.01 General Medicine, approved in May, 24, 2023.

Form of education

full-time

The period of development

6

Department of Surgery diseases №2

Vladikavkaz, 2023 г.

When developing the work program of the discipline, the basis is based on:

1. Federal State Educational Standard of Higher Education in the specialty 31.05.01 General Medicine, approved by the Ministry of Education and Science of the Russian Federation on February 9, 2016 №. 95

2. Curriculum OPOP VO in the specialty 31.05.01 General Medicine

LD-16-04-18

LD-16-05-19

LD-16-06-20, approved by the Academic Council of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia on May 25, 2023, protocol 8.

The work program of the discipline was approved at a meeting of the Department of Surgical Diseases No. 2 dated May 19, 2023, protocol No. 10.

Working coordination educational and methodological council from "23" May 2023 protocol No. 5. program disciplines approved.

Program disciplines approved scientists by the council central working FSBEI HE SOGMA of the Ministry of Health of Russia dated May 24, 2023, protocol No. 8.

Developers:



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Khetagurova
Doctor of Medicine

R.V. Zoloev

Content of the educational program

1. name of the discipline;
2. list of the planned learning outcomes in the discipline, correlated with the planned results of the study program;
3. the place of discipline in the structure of the educational program;
4. the amount of discipline in credit units, indicating the number of academic or astronomical hours allocated for contact work of students with a teacher (by type of training) and for independent work of students;
5. the content of the discipline, structured by topics (sections) with an indication of the number of academic or astronomical hours allocated for them and types of training;
6. a list of educational and methodological support for independent work of students in the discipline;
7. assessment tools for intermediate certification of students in the discipline;
8. a list of basic and additional educational literature necessary for mastering the discipline;
9. a list of resources of the information and telecommunication network "Internet" (hereinafter - the "Internet" network), necessary for mastering the discipline;
10. methodological instructions for students on the development of the discipline;
11. a list of information technologies used in the implementation of the educational process in the discipline, including a list of software and information reference systems (if necessary);
12. Description of the material and technical base necessary for the implementation of the educational process in the discipline.
13. conducting educational activities using e-learning and distance learning technologies

№№ п/п	Num ber /Inde x of comp ete ncy	Content of competency (or part of it)	Development results		
			To know	To be able	To have skills of
1	2	3	4	5	6
1.	PC-5	Semiotics, symptomatology of urological diseases. Instrumental examination methods. X-ray, radioisotope, ultrasound examination methods. CT and MRI.	Dysuric disorders, qualitative and quantitative changes in diuresis. Pain, causes. Physical, functional, urodynamic methods research. Methodology and information content of radiological research. Computed tomography, indications. Informativeness of MRI, indications	Identify pathological changes in the urinary and male reproductive systems	Algorithm for diagnostic studies
2.	PC-5 PC-6 PC-8	Urolithiasis disease. Hydronephrosis. Anomalies of the genitourinary system	Etiology and pathogenesis. Stone formation theories Classification of stones. The clinical picture. Diagnostic methods. Treatment of KSD, indications and methods of lithotripsy. Complications Modern classification, etiology and pathogenesis of hydronephrosis. Pelvic-ureteral segment stricture as the main cause of hydronephrosis. The role of additional vessels of the kidney in the development of the disease.	Diagnostics and forecasting of the course urolithiasis. Providing emergency care for renal colic. Modern methods of treatment of ICD. Reconstructive treatments. X-ray diagnostics of congenital malformations	Methodology for performing instrumental, X-ray and ultrasound examinations.

			<p>Symptoms and complications of the disease. Diagnosis, conservative and surgical treatment. The prognosis of the disease.</p> <p>Kidney anomalies. Types of kidney anomalies.</p> <p>Abnormalities of the ureters, bladder.</p> <p>Abnormalities of the urethra in men.</p> <p>Penile anomalies.</p> <p>Scrotal abnormalities.</p>		
3.	<p>PC-5</p> <p>PC-6</p> <p>PC-5</p> <p>PC-8</p>	<p>Acute and chronic pyelonephritis</p> <p>Tuberculosis of the genitourinary system</p>	<p>Classification, etiology, pathogenesis. Symptomatology. Diagnostics (clinical, laboratory, ultrasound). Treatment.</p> <p>Indications for conservative and surgical treatment. The role of urine passage restoration. Forecast. Prevention. Bacteriotoxic shock. Pathogenesis. Therapy. Prevention.</p> <p>Tuberculosis of the kidneys and urinary tract (secondary tuberculosis). Etiology, ways of penetration and spread of infection, pathogenesis. Pathological anatomy. Diagnostics: clinical, laboratory, bacterioscopic. Tuberculin diagnostics. Ultrasound, X-ray diagnostics.</p>	<p>Evaluate the antibiotic profile on urine culture.</p> <p>Determine the main directions of treatment.</p> <p>MT</p>	<p>Methods of clinical and laboratory diagnostics</p>

[illegible]

			kidney cancer. Hematogenous and lymphogenous metastasis in kidney cancer. Diagnosis of kidney cancer. The role of ultrasound as a screening test in the diagnosis of renal masses and a method of dispensary observation. Comprehensive vasographic study in kidney tumors, MRI in the diagnosis of kidney tumors. Differential diagnostics. The Role of Kidney Puncture Biopsy Treatment. Clinical examination of patients with kidney cancer. Prevalence, etiology and pathogenesis of bladder tumors. Epithelial formations of the bladder. Symptoms International classification according to the TNM system. Diagnostics Treatment.	diseases. Draw up a plan of examination and treatment.	bladder tumors
6.	PC-5 PC-6 PC-5 PC-6	Acute and chronic renal failure. Nephrogenic hypertension	Manifestations of acute renal failure. Causes, stages, therapy, principles of cleansing the body. Chronic renal failure. Development stages, classification. Conservative treatment. Classification of nephrogenic hypertension. Etiology and	Assess the medical history. Carry out differential diagnostics, draw up an examination plan and prescribe treatment.	Organize outpatient care for patients with renal failure.

[illegible]

	PC-5		intraperitoneal ruptures of the bladder. Combined injury. The symptomatology of ruptures.		
	PC-5		Urethral injury. Pathogenesis. The mechanism of injury. The role of pelvic bone injury. Symptomatology. Diagnostics, treatment.		
	PC-6		Damage to the scrotum and its organs. Open and closed damage to the scrotum. Symptomatology.		
	PC-8		Penile injury. The clinical picture. Symptomatology. Treatment. Organ-preserving operations. Kidney injury. Closed and open kidney injury. Pathogenesis. The role of the hydraulic effect in kidney damage. Classification: bruises, ruptures, detachment of the kidney from its leg. Symptomatology. Treatment. Indications for surgical treatment of kidney injury. Complications of kidney damage.		

3. The place of discipline in the structure of the educational program

The discipline "Urology" is a compulsory discipline of Block 1 of the Federal State Educational Standard of Higher Education in the specialty "General Medicine».

4. Discipline scope

№ № п/п	Type of work	Total credits	Total hour	Terms
				7
				hours
1	2	3	4	5
1	Contact work of students with teacher (total), including:	-	48	48
2	Lectures(L)	-	10	10
3	Clinical practical classes (PC)	-	38	38
4	Seminars(S)	-	-	-
5	Laboratory works (LW)	-	-	-
6	Independent student work (ISW)	-	24	24
7	Type of intermediate attestation	credit(C)		+
		exam (E)		
8	TOTAL	hours	72	72
		3ET	2	2

5. Discipline content

п/№	Term	The name of the topic (section) of the discipline	Types of educational activities (in hours)				Forms of monitoring progress
			L	LW	PC	Total	
1.	7	Urology	10	38	24	72	C, T3, C3
Total			10	38	24	72	Credit

6. The list of educational and methodological support for independent work of students in the discipline

№/п	№ term	Name of educational and methodological development
1	7	Fidarov F.B. Methodical recommendations for the implementation of independent extracurricular work of 4th year students of the medical and pediatric faculties

7. Assessment tools (AT) for intermediate certification of students in the discipline

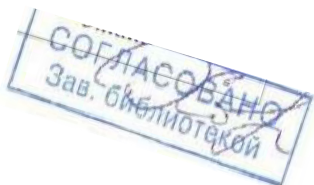
№/п	List of competencies	№ of term	Assessment indicator (s)	Evaluation criterion (s)	Grading scale	Name of AT
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1	2	3	4	5	6	7
1	PC-5 PC-6 PC-8	7	see the standard for assessing the quality of education, approved. By order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated 10.07.2018, No. 264 / o	see the standard for assessing the quality of education, approved. By order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated 10.07.2018, No. 264 / o	see the standard for assessing the quality of education, approved. By order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated 10.07.2018, No. 264 / o	Questions to credit; Tests; Solve of clinical situations

8. List of basic and additional educational literature necessary for mastering the discipline

№	Name	The author(s)	Year, place of publication	Number of copies	
				In library	At the department
1	2	3	4	5	6
Basic literature					
1.	Urology: textbook	ed. N.A Lopatkin	M. : GEOTAR-Media ,2013	109 5 3	2
				« student advisor » http://www.studmedlib.ru/ru/book/ ISBN9785970417676.html	
2.	Urology: textbook	Komyakov B.K .	GEOTAR-Media - ,2022	71	1
			« student advisor »	http://www.studmedlib.ru/ru/book/ ISBN9785970427163.html	
Additional literature					
1.	Urology. Guidelines	ed. N.A Lopatkin	M. : GEOTAR-Media , 2007	12	1

2.	Urology. Illustrated workshop .	ed. U.G. Alyaev	M. : GEOTAR-Media , 2011	1	
3.	Urology. Treatment	ed. N.A Lopatkin	M.: Littera,2012	2	
				« student advisor » http://www.studmedlib.ru/ru/book/ ISBN9785423501112.html	
4.	Urology: textbook	ed. S.Kh. Al-Shukri	M. : GEOTAR-Media , 2012	1	
5.	Child urology	Pugachev A.G	M. : GEOTAR-Media , 2009	50	1
				« student advisor » http://www.studmedlib.ru/ru/book/ /ISBN9785970409718.html	
6.	Acute renal failure.	Ermolenko V.M. Nikolaev A.Yu	M. : GEOTAR-Media , 2010	1	0
				« student advisor » http://www.studmedlib.ru/ru/book/ ISBN9785970413302.html	



9. The list of resources of the information and telecommunication network "Internet" necessary for mastering the discipline

1.«Консультант студента» <http://www.studmedlib.ru>

2. «Урология»

e-mail: urology@bionika-media.ru

10. Methodical instructions for students on mastering the discipline

Education consists of contact work (48 hours) and independent work (24 hours). The main study time is allocated for practical work on the analysis of case patients.

When studying the discipline, it is necessary to use the recommended literature, the necessary means of material and technical support, Internet technologies, etc., as well as to master practical skills.

Work with educational literature is considered as a type of educational work in the discipline and is performed within the hours allotted for its study. Each student is provided with access to the library funds of the department and the university.

Practical exercises are conducted in the form of an oral survey and written testing to determine the initial level of knowledge, demonstrate thematic patients and use visual aids, solve situational problems, answer test tasks and control questions, and analyze clinical patients.

In accordance with the requirements of the Federal State Educational Standard of Higher Education, it is necessary to widely use active and interactive forms of conducting classes in the educational process (computer simulations, business and role-playing games, analysis of specific situations, etc.). The proportion of classes conducted in interactive forms must be at least 10% of classroom lessons.

The student's work in a group forms a sense of collectivism and sociability.

Independent work of students implies the development of certain competencies in the studied discipline under the supervision of a teacher and includes classroom and out-of-class forms of work: theoretical training, writing case histories and abstracts, supervising inpatients and outpatient reception of patients, completing individual tasks, mastering practical skills. Independent work with patients contributes to the formation of deontological behavior, accuracy, discipline.

Work with educational literature is considered as a type of educational work in the discipline of "urology" and is performed within the hours allotted for its study (in the IWS section).

Each student is provided with access to the library funds of the medical academy and department.

For each section of the discipline, guidelines have been developed for students and teachers.

For successful and fruitful learning and mastering by students of the urology program, preference is given to the individual work of the student. Three quarters of the practice time is allocated to this. For this, a step-by-step scheme for conducting a practical lesson has been developed and applied. First of all, the initial level of knowledge of each student of the group is assessed using tests. After that, with the help of visual aids (pictures, photographs, slides), an analysis of the clinic and the course of the disease on this topic is carried out. At the next stage of training, each student is asked to make a diagnosis based on the results of examination of the patient, and then a problem with a description of the legend. In this task, he must describe the status, make a presumptive diagnosis, carry out a differential diagnosis, if necessary, offer additional examination methods, formulate a complete final diagnosis with its rationale and draw up a treatment plan, as well as propose preventive measures with its rationale. A demonstration of patients on the topic of the lesson is carried out, students master the skills necessary for making a diagnosis. When analyzing each topic, situational clinical tasks are solved and points are given, which is motivation for the successful mastering of the specialty.

At the final stage, students write tests, demonstrate the development of practical skills. The final grade is the cumulative points for all sessions plus the points for the final session.

Various types of educational work, including the student's independent work, contribute to mastering the culture of thinking, the ability to logically correctly formulate its results in written and oral speech; the readiness to form a systematic approach to the analysis of medical information, the perception of innovations; form the ability and readiness for self-improvement and self-realization.

Questions on the academic discipline "urology" are included in the final state certification of graduates.

11. The list of information technologies used in the implementation of the educational process in the discipline

The educational technologies used in the study of this discipline make up about 15% of interactive lessons from the volume of classroom lessons.

Types of educational technologies:

☐ imitation:

a) non-game simulation technologies: contextual learning

b) game simulation technologies: role-playing business games

☐ non-imitation technologies: problem lecture, lecture - conversation

Contextual training is carried out throughout the entire period of teaching the discipline, especially during the IWS under the supervision of a teacher - knowledge, skills, skills are given not as a subject for memorization, but as a means of solving professional problems.

12. Description of the material and technical base necessary for the implementation of the educational process in the discipline

The material and technical base of the department is represented by:

The total area of the educational and laboratory base is 410 - m2, including 350 m2 - educational, 60 m2 - educational and auxiliary.

This fund includes 125 training rooms for lecture

1 study room for practical training -30 m

2 assistant professor's office - 29 m

The classroom is in satisfactory condition, has a training board and equipped with a sufficient number of desks and chairs

№/ п	Name of equipment	Amount	Technical condition
1	2	3	4
Special equipment			
1.	Computers	2	good
2.	Xerox	1	good
3.	Proector	1	good
4.	Printers	2	satisfactory.
Таблицы			
5.	Tables, pcs.	40	Need to change

13. Conducting educational activities using e-learning and distance learning technologies

In the context of the introduction of restrictive measures (quarantine) associated with an unfavorable epidemiological situation, the threat of the spread of a new coronavirus infection and other force majeure events that do not allow full-time training, it is possible to study this discipline or part of it using e- learning and distance educational technologies. Teaching the discipline in the above situations will be carried out through the development of an electronic course with access to video lectures and interactive course materials: presentations, articles, additional materials, tests and various tasks. When conducting training sessions, monitoring progress, as well as intermediate certification of students, platforms of the electronic information and educational environment of the academy and / or other e-learning systems recommended for use in the academy, such as Moodle, Zoom, Webinar, etc., can be used. Lectures can be presented in the form of audio, video files, "live lectures", etc. Conducting seminars and practical classes is possible on-line both in synchronous and asynchronous modes. Seminars can be held in the form of web-conferences.