



Urology Course Outline (Module)

Assigned to Department of Urology
 Academic Curriculum 31050151_15_14ЛД ин.plx
 31.05.01 General Medicine

Mode of Study **Intramural**
 Total Credit Value **_2_ credit points**

The Course outline developed by:
 The Head of Department G.S. Chernetsova, professor, PhD in Medical Science, Ch.B. Alimov, associate professor, PhD in Medical Science.

Semester Academic Year	8 (4.2)		Total	
	18			
Weeks	AC	CO	AC	CO
Type of Training				
Lectures	18	18	18	18
Practical Session	36	36	36	36
Including Interactive Session	3	3	3	3
Total In-class Session	54	54	54	54
Face-to-face Learning	54	54	54	54
Individual Work	18	18	18	18
Total	72	72	72	72

1. Course outline objectives

1.1	To teach students the basics of urology in various nosological forms, as well as to teach a sufficient amount of practical skills necessary for the examination and treatment of urological patients, using modern methods of diagnosis and treatment.
-----	--

2. PLACE OF THE COURSE IN THE EDUCATIONAL PROGRAMM

Educational Program Units: Б1.Б	
2.1	Students Preliminary Training Requiriments:
2.1.1	Anatomy
2.1.2	Educational practice in obtaining primary professional skills, including primary skills and skills of research activities (General care of surgical patients)
2.1.3	Latin language
2.1.4	Histology, embryology, cytology
2.1.5	Microbiology, virology
2.1.6	Biochemistry
2.1.7	Topographic Anatomy and Operative Surgery
2.1.8	Pharmacology
2.1.9	Propedeutics of internal diseases
2.1.10	general surgery
2.1.11	Radiotherapy
2.1.12	Pathophysiology, clinical pathophysiology
2.2	Course Units and Practical Sessions imposing the prior Proficiency:
2.2.1	Hospital therapy
2.2.2	Hospital surgery
2.2.3	Hospital Surgery, Pediatric Surgery
2.2.4	Faculty Therapy
2.2.5	Hospital therapy, endocrinology
2.2.6	obstetrics and gynecology
2.2.7	Anesthesiology, resuscitation, intensive care

3 STUDENTS' COMPETENCIES RESULTING FROM THE COURCE UNIT (MODULE)

PC-2: The ability and willingness to conduct preventive medical examinations, clinical examination and the implementation of dispensary observation

Knowledge:

Level 1	main nosological forms of urological diseases
Level 2	method of examination of the patient urological profile
Level 3	keeping medical records and interpreting patient data

Skills:

Level 1	to collect a history of patients with urological profile
Level 2	apply objective methods of examination of the patient
Level 3	issue a case history of a patient with a urological profile

Expertise:

Level 1	methods of communication with the patient and his relatives, middle and junior medical staff
Level 2	Algorithm for diagnosing a patient with signs of urological diseases
Level 3	method of clinical examination of patients with urological diseases

PC-5: Readiness to collect and analyze patient complaints, data from his anamnesis, examination results, laboratory, instrumental, pathological and anatomical and other studies in order to recognize a condition or establish the presence or absence of a disease

Knowledge:

Level 1	basic methods of clinical examination and evaluation of the functional state of the patient's body for urological diseases
Level 2	the main symptoms and syndromes of urological diseases, the basics of differential diagnosis

Level 3	algorithm of diagnosis (main, concomitant, complications), taking into account the International Statistical Classification of Diseases and Health Problems (ICD)
Skills:	
Level 1	obtain information about the disease, apply objective methods of examination of the patient, identify general and specific signs of urological diseases
Level 2	carry out activities to identify symptoms and syndromes of urological diseases
Level 3	establish a clinical diagnosis in accordance with the accepted classification
Expertise:	
Level 1	main methods of physical examination of the urogenital organs
Level 2	skills of differential diagnosis of urological diseases
Level 3	basic methods of clinical diagnosis

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 Problems Related to Health, X revision

Knowledge:	
Level 1	normal anatomy and normal physiology of the urinary system
Level 2	main pathognomonic signs of urological diseases, and their significance in conjunction with general clinical symptoms
Level 3	pathogenetically substantiated methods of diagnosis and treatment of major urological diseases
Skills:	
Level 1	reveal the meaning of health problems and present the dynamics of the development of the pathological state
Level 2	compare different pathological conditions associated with impaired health
Level 3	to determine the practical value of clinical symptoms and syndromes on the basis of which the pathological condition and the patient's health problems are built
Expertise:	
Level 1	skills of work with literature highlight priority sources of information
Level 2	skills of search, systematization and free presentation of material on urological pathology and other nosological forms
Level 3	skills to identify clinical symptoms, syndromes of nosological forms of urological diseases with the rationale for the child's own health position

PC-8: the ability to determine the tactics of managing patients with various nosological forms

Knowledge:	
Level 1	basic tactical schemes and algorithms for managing patients with a urological profile
Level 2	main methods and principles of management of patients with urological profile
Level 3	basic principles of treatment of patients with urological profile
Skills:	
Level 1	assess the patient's condition and determine the relationship with the pathology of the urological profile
Level 2	determine rational tactical schemes and algorithms for managing patients with a urological profile
Level 3	offer the most effective methods of treating patients with a urological profile
Expertise:	
Level 1	modern sources of information special literature for the management of patients with urological profile
Level 2	basic tactics and algorithms for the management of patients with a urological profile
Level 3	combined methods of treatment of patients with urological profile

PC-9: readiness to manage and treat patients with various nosological forms on an outpatient basis and in a day hospital

Knowledge:	
Level 1	main methods of diagnosing patients with urological pathology conducted in an outpatient setting and day hospital
Level 2	the main methods of management of patients with urological pathology conducted in an outpatient setting and day hospital
Level 3	the main methods of management of patients with urological pathology conducted in an outpatient setting and day hospital
Skills:	
Level 1	highlight the basic principles of reference and the sequence of methods for examining patients with urological pathology

Level 2	compare methods of management and treatment of patients with urological pathology in an outpatient setting and day care
Level 3	to assess the practical value of diagnostic and treatment methods for the management of patients in ambulatory conditions and in the conditions of day hospital
Expertise:	
Level 1	the skills of collecting literary sources for the management and treatment of patients with urological pathology
Level 2	methods of search and systematization of the principles of treatment of patients in an outpatient setting and day hospital
Level 3	skills of management and treatment of patients with urological pathology in an outpatient setting and day hospital

Final Students' Competences

3.1	Knowledge:
<p>normal anatomy and normal physiology of the urinary system (PC-6); clinical symptoms and syndromes of main urological diseases (urolithiasis, acute and chronic pyelonephritis, acute and chronic perinephritis, acute and chronic cystitis, tumors of the kidneys, ureter, bladder, prostate gland, the main deontological aspects of the doctor-patient-family relationship, especially the relationship with colleagues, nurses and hospital attendants (PC-2); benign prostatic hyperplasia, injuries of the kidneys, ureters and bladder) (PC-5, PC-6); principles of writing an academic history of the urological patient taking into account the survey (PC-5); the relationship of the clinical picture of the disease with pathological and pathophysiological changes in the urinary system (PC-6, PC-9);pathogenetically substantiated methods of diagnosis and treatment of major urological diseases (urolithiasis, nonspecific inflammatory diseases of the urinary system, BPH, prostate cancer, CRP, bladder tumor, testicular tumor, injury to the kidneys, ureters, bladder) (PC-6); indications and contraindications for the rehabilitation treatment of urological patients, as well as the basic principles of preventive measures for the main urological diseases in both adults and adolescent patients (PC-2); classification of urolithiasis, acute and chronic nonspecific diseases of the kidneys, bladder, classification of tumors of the kidneys, ureters, bladder, prostate, BPH, injuries of the kidneys, ureters, bladder (PC-6).</p>	
3.2	Skills:
<p>correctly collect and interpret complaints and anamnesis of the disease in a patient with urological diseases (PC-5), palpate the kidneys, check the symptom of fluttering, palpate the projection of the lower ureter, bladder with the definition of the main palpatory signs of urological diseases (PC-5);palpate the prostate gland with the definition of the main palpatory signs of prostate disease (PC-5); conduct pathophysiological analysis of clinical symptoms of major urological diseases (PC-6); to substantiate pathogenetically justified clinical, laboratory, X-ray, and ultrasound methods for diagnosing major urological diseases and draw up a plan for the examination of this category of patients (PC-6); to substantiate pathogenetically justified methods of treatment of major urological diseases and draw up a treatment plan for this category of patients (PC-9) develop a system of preventive measures aimed at the correction of pathophysiological disorders, helping to reduce the recurrence of urological diseases in different age groups of patients (PC-6); organize the collection of urine, blood for clinical, biochemical and immunological studies (PC-5);</p>	
3.3	Expertise:
<p>interpretation of clinical, laboratory and instrumental methods for diagnosing diseases of the kidneys, ureters, bladder and prostate gland (PC-5, PC-6); an algorithm for diagnosing a patient with signs of urological diseases, based on the analysis of symptoms, the dynamics of their development, objective examination data, laboratory-instrumental, radiological, and morphological examination methods (PC-5, PC-6, PC-8); the algorithm of therapeutic measures aimed at eliminating the main pathogenetic disorders in patients with urological diseases in different age groups, with a clinical picture of the disease (PC-6).</p>	