

МЕДИЦИНСКИ УНИВЕРСИТЕТ - ВАРНА  
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## FACULTY OF MEDICINE

Approved:

Dean:

Prof. Dr. Yoto Yotov, MD, PhD



## SYLLABUS IN UROLOGY

Specialty	MEDICINE
Educational - qualification degree	master
Organizational form of education	full-time
Auditorial activity (Lectures/Seminars)	45 (15/30)
Extra-auditorial activity	15
ECTS- credits	2
Discipline type	compulsory
Semester/s of education	ninth
Semester of examination	ninth
Developer(s) of the Syllabus:	Assos. Prof. Tosho Ganev DMs
	Assist. Prof. Boyan Lazarov PhD

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## ANNOTATION

<b>Aims of the course</b>	<p>Urology is a basic medical surgical discipline for the diagnosis and treatment of diseases of the genitourinary system in men and the urinary system in women. Urological diagnostics requires knowledge in imaging diagnostics - ultrasound, radiography, computed tomography and magnetic resonance tomography. The urologist performs endoscopic diagnostics - cystoscopy, ureteroscopy, ureterorenoscopy. Urological diseases have conservative and surgical treatment. The main part of urological pathology is accessible for treatment through endoscopy. Modern urology continues its development in endoscopic and non-surgical treatment methods and the percentage of open classical operations is significantly reduced.</p> <p>The aim of urology training is to provide medical students with basic theoretical and practical knowledge about the essence of urology, urological diseases, methods of urological diagnostics, types of treatment. Based on theoretical knowledge and practical exercises, students should be able to perform a urological examination and make a urological diagnosis, as well as a differential diagnosis with other diseases. The student should be familiar with basic urological manipulations.</p> <p>The tasks are as follows: Taking a history and status of a urological patient - familiarization with basic urological anamnestic and physical symptoms.</p>
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<b>Outcomes for students at the end of the course:</b>	
<b>Competence group</b>	<b>1. Patient care that is compassionate, appropriate, and effective in treating health problems and promoting health.</b>
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>▪ Working with a urological patient in emergency conditions; in deferred emergency conditions and in case of elective surgery</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>▪ <i>Primary clinical examination of a urological patient</i></li> <li>▪ <i>Primary surgical wound treatment - types of dressings, dressing materials and specific dressings</i></li> <li>▪ <i>Specific clinical tests in the diagnosis of urological patients</i></li> <li>▪ <i>Ability to interpret imaging studies - X-ray, CT, MRI and ultrasound.</i></li> <li>▪ <i>Basic behavior in the operating room – aseptic techniques</i></li> <li>▪ <i>Prescribing basic medications in the Urology Clinic - anticoagulants, antibiotics, steroids, NSAIDs</i></li> <li>▪ <i>Postoperative treatment and the possibilities of outpatient care in the treatment of a patient with urological diseases</i></li> <li>▪ <i>Basic skills for working with medical documentation - ICD, Informed consent, accompanying documentation</i></li> </ul>
<b>Competence group</b>	<b>2. Medical Knowledge</b> about established and evolving biomedical, clinical, and related (eg, epidemiological and socialbehavioral) sciences and the application of this knowledge to patient care.
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>▪ Current trends in the treatment of urological patients</li> </ul>



	<ul style="list-style-type: none"> <li>Applying updated knowledge and improving the quality of patient care</li> </ul>
Skills	<ul style="list-style-type: none"> <li><i>To use what has been learned in real clinical situations</i></li> <li><i>Decision-making in emergency situations</i></li> <li><i>Preparation of a treatment algorithm for the entire treatment period</i></li> </ul>
Competence group	<b>3. Practice-Based Learning and Improvement</b> that involves investigation and evaluation of patient care, appraisal, and assimilation of scientific evidence, and improvements in patient care.
Knowledge	<ul style="list-style-type: none"> <li>Modern practical guidelines for the treatment of a patient with pathology of the genitourinary system (GUS)</li> </ul>
Skills	<ul style="list-style-type: none"> <li><i>Working with scientific databases</i></li> <li><i>Ability to present a specific problem</i></li> <li><i>Ability to analyze clinical data and integrate them into individual presentations on a given problem</i></li> <li><i>Critical approach to analyzing information</i></li> <li><i>Ability to give a recommendation on a given task</i></li> <li><i>Working with test tasks</i></li> </ul>
Competence group	<b>4. Interpersonal and Communication Skills</b> that result in effective information exchange and teaming with patients, their families, and other health professionals.
Knowledge	<ul style="list-style-type: none"> <li>Legal and ethical norms when working with urological patients - communication with other disciplines and hospital units, state institutions - social workers, police, fire department, etc.</li> <li>Ability to form an interdisciplinary team on a given problem</li> <li>Communication and partnership with other disciplines in decision-making</li> </ul>
Skills	<ul style="list-style-type: none"> <li><i>Communicativeness, ethics and empathy when working with a patient in an impaired state</i></li> </ul>
Competence group	<b>5. Professionalism</b> , as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
Knowledge	<ul style="list-style-type: none"> <li>Practical and theoretical knowledge acquired during the semester</li> </ul>
Skills	<ul style="list-style-type: none"> <li><i>Communication with patient, medical staff and non-medical employees</i></li> </ul>
Competence group	<b>6. Systems-Based Practice</b> , as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.
Knowledge	<ul style="list-style-type: none"> <li>Basic knowledge about the functioning of the healthcare system in the Republic of Bulgaria and the European Union</li> </ul>
Skills	<ul style="list-style-type: none"> <li><i>Be able to integrate their knowledge into everyday activities</i></li> <li><i>Targeted search for opportunities for improvement in extracurricular workload</i></li> </ul>

<b>Key competencies for lifelong learning<sup>1</sup>, that the discipline develops:</b>	
<b>Literacy competence</b> Literacy is the ability to identify, understand, express, create, and interpret concepts, feelings, facts and opinions in both oral and written forms, using visual, sound/audio and digital materials across disciplines and contexts. It implies the ability to communicate and connect effectively with others, in an appropriate and creative way.	<b>X</b>
<b>Multilingual competence</b> This competence defines the ability to use different languages appropriately and effectively for communication. It broadly shares the main skill dimensions of literacy: it is based on the ability to understand, express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing) in an appropriate range of societal and cultural contexts according to one's wants or needs.	<b>X</b>
<b>Mathematical competence and competence in science, technology, engineering</b> A. Mathematical competence is the ability to develop and apply mathematical thinking and insight in order to solve a range of problems in everyday situations. Building on a sound mastery of numeracy, the emphasis is on process and activity, as well as knowledge. Mathematical competence involves, to different degrees, the ability and willingness to use mathematical modes of thought and presentation (formulas, models, constructs, graphs, charts). B. Competence in science refers to the ability and willingness to explain the natural world by making use of the body of knowledge and methodology employed, including observation and experimentation, in order to identify questions and to draw evidence-based conclusions. Competences in technology and engineering are applications of that knowledge and methodology in response to perceived human wants or needs. Competence in science, technology and engineering involves an understanding of the changes caused by human activity and responsibility as an individual citizen.	
<b>Digital competence</b> Digital competence involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking.	<b>X</b>
<b>Personal, social and learning to learn competence</b> Personal, social and learning to learn competence is the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career. It includes the ability to cope with uncertainty and complexity, learn to learn, support one's physical and emotional well-being,	<b>X</b>

<sup>1</sup> As defined in 2018 r. by the European Union Council ([https://eur-lex.europa.eu/legal-content/BG/TXT/HTML/?uri=CELEX:32018H0604\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/BG/TXT/HTML/?uri=CELEX:32018H0604(01)&from=EN))

to maintain physical and mental health, and to be able to lead a health-conscious, future-oriented life, empathize and manage conflict in an inclusive and supportive context.	
<b>Citizenship competence</b> the ability to act as responsible citizens and to fully participate in civic and social life, based on an understanding of social, economic, legal and political concepts and structures, as well as global developments and sustainability.	X
<b>Entrepreneurship competence</b> Entrepreneurship competence refers to the capacity to act upon opportunities and ideas, and to transform them into values for others. It is founded upon creativity, critical thinking and problem solving, taking initiative and perseverance and the ability to work collaboratively in order to plan and manage projects that are of cultural, social or financial value.	
<b>Cultural awareness and expression competence</b> Competence in cultural awareness and expression involves having an understanding of and respect for how ideas and meaning are creatively expressed and communicated in different cultures and through a range of arts and other cultural forms. It involves being engaged in understanding, developing and expressing one's own ideas and sense of place or role in society in a variety of ways and contexts.	

<b>Methods of education</b>
<ul style="list-style-type: none"> <li>▪ lectures</li> <li>▪ seminars</li> <li>▪ practical exercises, clinical cases, interdisciplinary consultations and discussions, work with scientific literature, regulatory documents, databases, analyses, presentations.</li> </ul>

<b>Links with other courses from the curriculum of the specialty</b>
<ul style="list-style-type: none"> <li>▪ surgery, nephrology, hemodialysis and pharmacology</li> </ul>