

UROLOGY	
GENERAL INFORMATION	
Course coordinator	Professor Josip Galić, MD, PhD
Assistant/Associate	Assoc. Prof. Igor Tomašković, MD, PhD Asst. Prof. Željko Vidas, MD, PhD Asst. Prof. Bojan Sudarević, MD, PhD Ivan Radoja, MD, PhD Oliver Pavlović, MD Josip Perković, MD Vinko Krajina, MD
Study Programme	Integrated undergraduate and graduate university study of Medicine
Status of the course	Mandatory
Year of study, semester	5th year, 9th semester
ECTS	2
Workload (hours)	Lecture (15); Seminars (10); Exercises (30)
Expected number of students	70
COURSE DESCRIPTION	
Course objectives	
<p>Urology is a branch of medicine that, as a surgical medical specialty, is focused on the diagnosis and treatment of patients with diseases of the urinary system, the treatment of diseases of the male reproductive system and infertility. As a modern profession, urology is characterized by a multimodal approach in the diagnosis and treatment of patients. The main goal of the course is to acquaint students with basic knowledge of the anatomy, physiology and pathophysiology of the urinary system in both sexes and the sexual system in men through listening to lectures, analysis of examples and exercises. The course enables the acquisition of knowledge about urology and enables students to recognize urological symptoms according to the guidelines of the Croatian Urological Society and the European Urological Society. The task of teaching is to categorize urological symptoms through lectures and exercises and to present and process the basics of urological disorders in children and adults of both sexes. Through the integration of knowledge, the etiology, pathogenesis, diagnostic evaluation and therapy of urological diseases will be explained. The purpose of the course is to enable students to generate a solid foundation for understanding the terminology and symptomatology of various urological disorders they will encounter in outpatient and clinical practice and to interpret the results of urological processing. After processing the material during the lecture and after performing the exercises, students will be able to conclude the correct diagnosis of urological disorders and choose the appropriate method of treatment of patients.</p>	
Enrolment requirements and entry competencies	
<p>According to the Study Regulations. Passed all exams of previous years of study. Basic knowledge of anatomy, physiology and pathophysiology of the urinary system and male reproductive system. Learning outcomes at the program level to which the course contributes</p>	
Learning outcomes at the Programme level	
1.1., 1.2., 2.1., 2.2., 2.3., 3.1., 3.2., 3.3., 3.4., 3.5., 4.1., 4.2.	
Learning outcomes (5-10)	
It is expected that after passing the exam in the course "Urology" students will be able to:	

1. Explain the physiology and pathophysiology of the urinary system and the male reproductive system.
2. Describe and explain the origin of the disease and signs: tumors of the adrenal gland, kidney, ureter, bladder, prostate, urethra, penis and testicles, urolithiasis, benign prostatic hyperplasia, obstructive uropathy, inflammatory diseases, neurogenic bladder, erectile dysfunction, erectile dysfunction, the most common diseases of pediatric urology, urotract injuries, vascular diseases in urology and renal failure.
3. Independently identify and distinguish urological symptoms in adults and children.
4. Associate urological symptoms with individual urological nosological entities.
5. Perform, under the supervision of a urologist, a urological clinical examination of the patient, including a detailed examination of the abdomen, prostate, penis and testicles, and then critically analyze, evaluate and interpret the findings.
6. List the most important diagnostic methods and give approximate results of diagnosis of tumors of the adrenal gland, kidney, ureter, bladder, prostate, urethra, penis and testicles, urolithiasis, benign prostatic hyperplasia, obstructive uropathy, inflammatory diseases, neurogenic bladder dysfunction, erectile bladder dysfunction infertility, the most common diseases of pediatric urology, urinary tract injuries, vascular disease in urology and renal failure.
7. Describe and explain conservative and operative methods of treatment of urological patients.
8. State and roughly explain the choice of treatment for tumors of the adrenal gland, kidney, ureter, bladder, prostate, urethra, penis and testicles, urolithiasis, benign prostatic hyperplasia, obstructive uropathy, inflammatory diseases, neurogenic bladder, erectile dysfunction, erectile dysfunction most common diseases of pediatric urology, urotract injuries, vascular diseases in urology and renal failure.
9. Critically consider, select and apply effective preventive measures, diagnostic procedures and methods of treatment of urological symptoms in order to prevent the occurrence of the disease, improve the health of the patient or complete cure.

Course content

Lectures

The course would include the latest findings from the scientific branch of urology. The course will explain embryology, anatomy and physiology of the urinary system and male reproductive system. Disorders of urogenital system development, obstructive uropathy, urological diseases in children, inflammatory diseases of urogenital system, urogenital system stones, urogenital system neoplasms, urogenital system injuries, vascular diseases in urology, neurogenic bladder and urodynamics, renal failure, will be described. and kidney explantation, erectile dysfunction, and male infertility.

Seminars

Diagnostic methods will be presented to help us define the etiology of urological symptoms and diseases. The diagnostic methods necessary to understand the pathophysiology of the urinary system and the male reproductive system and their differentiation will be explained in order to select the optimal type of treatment. Indications and contraindications for certain types of diagnostic tests and treatments will be explained.

Exercises

Introduce students to the segments of urological examination: history, clinical examination and analysis of diagnostic tests. Aspects of performing urological laboratory and radiological diagnostic tests will be summarized. Students will be present during the work of the regular, control and consultation urological clinic. He will actively participate in the segments of outpatient work, including taking a medical history, and will perform examinations of the abdomen and external

genitalia, digitorectal examination of patients and placement of a urinary catheter. The technique of performing ultrasound examination of the abdomen and scrotum and the technique of performing urethrocytoscopy will be presented. Conservative and operative methods of treating urological symptoms and diseases, including minimally invasive procedures, will be covered.

Mode of teaching

Lectures; seminars; Clinical exercises

Student obligations

Participants are required to regularly attend and actively participate in classes and exercises according to the Regulations on studying at the University of Josip Juraj Strossmayer in Osijek in order to be able to take the exam. Attendance at all forms of classes is mandatory, and the student must access all knowledge tests. A student may justifiably miss 30% of lectures and seminars. Exercises are mandatory. Unfinished exercise must be colloquial. Knowledge testing is done by checking activities during classes and during exercises. Active participation in classes and exercises is a prerequisite for taking the final written and oral exam.

Monitoring student work (alignment of learning outcomes, teaching methods and grading)

Teaching activity	ECTS	Learning outcome	Student activity	Assessment methods	Grade points	
					Min.	Max.
Lectures and seminars	0,5	1-5	Class attendance	Record of attendance	5	20
Exercises	0,5	1-5	Attendance and active participation in exercises	Exercise diary	15	30
Final exam	1,0	1-5	Learning for the oral exam	Oral exam	30	50
Total	2				50	100

Evaluation of the final exam:

Student answer	Grade points
The answer meets the minimum criteria	18.0
The average answer with noticeable errors	24.0
The very good answer with minor errors	30.0
The exceptional answer	36.0

Calculation of final grade:

Grades obtained during the oral exam are added to the points earned during the course. The evaluation is performed by absolute distribution, ie on the basis of the final achievement and is compared with the numerical system as follows:

A - excellent (5): 80-100 points; B - very good (4): 70-79.99 points; C - good (3): 60-69.99 points; D - sufficient (2): 50-59.99 points

Required reading (available in the library and through other media)

Title	Number of copies in the library	Availability through other media
1. Vidović M. Urologija, Priručnik za medicinare, Školska knjiga Zagreb, 2008.	30	
2. Gotovac J. Urologija. 2. izd., Naklada Ljevak, Zagreb, 2011.	30	
Additional reading		
<p>1. Šoša T. i sur. Kirurgija (Poglavlje 34: Urologija.), Naklada Ljevak, Zagreb, 2007. str. 1153 -1183.</p> <p>2. Novak R. i sur. Odabrana poglavlja iz urologije, Sportska tribina, 1987.</p> <p>3. Tucak A i sur. Urolitijaza, Znanstvena jedinica Opće bolnice Osijek, 1989.</p> <p>4. Novak R, Tucak A i sur. Urološka onkologija, Medicinska naklada Zagreb, Znanstvena jedinica Osijek, 1994.</p> <p>5. Kröpfl D, Novak R, Tucak A i sur. Rekonstrukcijska urološka kirurgija, Sveučilište J.J. Strossmayera u Osijeku, Medicinska naklada Zagreb, 1999.</p>		
Course evaluation procedures		
Anonymous, quantitative, standardized student survey on the subject and work of teachers conducted by the Office for Quality of the Medical Faculty Osijek.		
Note /Other		
E-learning is not included in the norm of subject hours, but it is used in teaching and contains links to various pages, video and audio materials available on the website.		