

UROLITHIASIS	
GENERAL INFORMATION	
Course coordinator	Professor Josip Galić, MD, PhD
Assistant/Associate	Professor Ivan Karner, MD, PhD Associate Professor Igor Tomašković, MD, PhD Assistant Professor Vatroslav Šerić, PhD
Study Programme	Integrated undergraduate and graduate university study of Medicine
Status of the course	Elective
Year of study, semester	5th year, 9th semester
ECTS	2
Workload (hours)	Seminars (25)
Expected number of students	30
COURSE DESCRIPTION	
Course objectives	
<p>The main goal of the course is to acquaint students with basic knowledge about the pathophysiology of urolithiasis in adults and children. The course enables the acquisition of knowledge about urolithiasis and enables students to recognize the symptoms and clinical signs of urolithiasis according to the guidelines of the Croatian Urological Society and the European Urological Society. The task of teaching is to categorize the symptoms and clinical signs of urolithiasis through seminars. Through the integration of knowledge, the etiology, pathogenesis, diagnostic evaluation and therapy of urolithiasis will be explained. The purpose of the course is to enable students to generate a solid foundation for understanding the symptoms of urolithiasis that they will encounter in outpatient and clinical practice and to interpret the results of diagnostic processing. After processing the material during the seminar, students will be able to conclude the correct diagnosis of urolithiasis 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)	
<p>It is expected that after passing the exam in the course "Urology" students will be able to:</p> <ol style="list-style-type: none"> 1. Explain the physiology of the urinary system and the pathophysiology of urolithiasis, its symptoms and clinical signs. 2. Independently identify and differentiate the symptoms and clinical signs of urolithiasis in adults and children. 3. List the most important methods of diagnosing urolithiasis. 4. Describe and explain conservative and operative methods of treating patients with urolithiasis. 5. Critically consider, select and apply effective preventive measures, diagnostic procedures and methods of treatment of urolithiasis in order to prevent the occurrence of the disease, improve the health of the patient or complete cure. 	

Course content

Seminars: Epidemiological research on urolithiasis and risk factors. Symptomatology of urolithiasis, diagnosis and diagnostic procedures. Metabolic studies of urolithiasis, diagnosis and diagnostic procedures. Treatment of urolithiasis. Extracorporeal lithotripsy ESWL. The approach to teaching is multidisciplinary. The course presents practical procedures for the analysis of urinary calculus, metabolic treatment of patients with nephrolithiasis and modern methods of treatment of urolithiasis by extracorporeal shock wave lithotripsy, percutaneous litholapaxy and ureterorenoscopy. Instruments and procedures of adjuvant methods such as JJ stents and percutaneous nephrostomies are also presented.

Mode of teaching

Seminars

Student obligations

Participants are required to regularly attend and actively participate in classes 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 seminars. Knowledge testing is done by checking activities during classes and during exercises. Active participation in classes 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.
Seminars	1,0	1-5	Class attendance	Record of attendance	5	20
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	30.0
The average answer with noticeable errors	37.0
The very good answer with minor errors	44.0
The exceptional answer	50.0

Calculation of final grade:

Students who obtained 30 or more points on the final exam, the points obtained on the final exam are added to the grade points obtained during the class, and this sum constitutes the final grade. Given that the study program provides for the descriptive evaluation of elective courses, the subject holder assigns a grade of "passed" at the end to a student who achieves 50 or more grade points in the course.

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

Title	Number of copies in the library	Availability through other media
1. Tucak A. Urolitijaza, Osijek, 1996.	30	
Additional reading		
1. Tucak A i sur. Urolitijaza, Znanstvena jedinica Opće bolnice Osijek, 1999.		
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.		