

Faculty of Medicine in Rijeka

Curriculum 2024/2025

For course

Urology

Study program:	Medical Studies in English (R) University integrated undergraduate and graduate study
Department:	Department of Urology
Course coordinator:	prof. dr. sc. Španjol Josip, dr. med.
Year of study:	5
ECTS:	2
Incentive ECTS:	0 (0.00%)
Foreign language:	Possibility of teaching in a foreign language

Course information:

Urology is a compulsory course on the 5th year of the Integrated Undergraduate and Graduate Study of Medicine in English. It consists of 15 hours of lectures, 5 hours of seminars and 22 hours of practicals, total of 42 hours (2 ECTS credits). The course is held at the Department of Urology, Clinical Hospital Center Rijeka.

Course objectives: The goal of this course is to encounter students with basic knowledge and skill in the field of urology. Further goal is to introduce and train students to perform physical exam and take history of urologic patients, to put urinary catheter both in male and female, to know diagnostic and therapeutic algorithms for malignant urogenital tumors, to know diagnostic and therapeutic algorithms for patients with urolithiasis and urinary infections. Also, the aim of the course is to encounter students with methods and algorithms for early detection of malignant urogenital tumors, to know diagnostic and therapeutic algorithms for patients with urogenital trauma, to know basics of urogenital wounds and to know recognise emergency conditions in urology.

Course content: Historical review of the development of urology, symptoms of urologic conditions, diagnostic methods in urology, diagnostic methods and treatment of patients with kidney cancer, bladder cancer, prostate cancer, retroperitoneal tumors, benign prostatic tumors, infections of the prostate, urolithiasis, emergency conditions in urology, sterility, erectile dysfunction, infections of the genitourinary tract, pathology of scrotum and penis, congenital anomalies of the urinary system. Also, the student s will be introduce with different endoscopic methods and basics of kidney transplantation On seminars topics are: early detection of prostate cancer, differential diagnosis of microhematuria, diagnosis and treatment od urinary tract infections, treatment of advanced bladder cancer, early detection and treatment of kidney cancer On practicals students will perform or attend to next procedures: physical examination of urologic patient, urinary derivation (urinary catheter, percutaneous nephrostomy, ureteral stent) and attend to basic endourological and imaging methods in urology.

Teaching: Classes are organized in the form of lectures, seminars and practicals. Practicals are supervised by urologist and the student are actively involved in practicals in accordance with epidemiological recommendations. Teaching stuff will discuss with the students during practicals. By completing all teaching activities, the student must pass obligatory written test and final oral exam. By completing all teaching activities, including the final exam, the students will acquire 2 ECTS credits.

List of assigned reading:

1. Fučkar Ž, Španjol J. Urologija I i II, Medicinski fakultet u Rijeci, 2013.
2. McAninch JW, Lue TF. Smith&Tanagho's General Urology. McGraw -Hill, 19th edition, New York; 2020.

List of optional reading:

1. Fučkar Ž. Povijest urologije na Sušaku, Digital Point, Rijeka 2006.
2. <http://www.uroweb.org/nc/professional-resources/guidelines/online/>
3. Fučkar Ž i dr. Sonografija urogenitalnog sustava I. i II. dio. Digital Point, Rijeka; 2001
4. Partin AW, Peters CA, Kavoussi LR, Dmochowski RR, Wein AJ. Campbell Walsh Wein Urology. Elsevier, 12th edition; 2020.

Curriculum:

Lectures list (with titles and explanation):

L1 - Introduction to the course and historical review

Understanding to the aims, contents and requirements of the course. To know brief historical overview of the development of urology

L2 - The symptoms of urologic conditions

To describe main and the most frequent symptoms of different urologic conditions. To know and to recognize specific symptoms of urologic conditions. To know basics about distinguish different symptoms between urologic conditions.

L3 - Emergency conditions in urology

To describe and understand emergency conditions in urology. To know diagnostic and therapeutic algorithms in emergency conditions in urology

L4 - Pathology of scrotum and penis

To explain specific pathological conditions of the scrotum and penis. To know diagnostic and therapeutic methods in the diseases of the scrotum and penis

L5 - Male sterility and erectile dysfunction

To explain causative mechanisms of male sterility and erectile dysfunction. To know methods for diagnosis and treatment of male sterility and erectile dysfunction

L6 - Retroperitoneal tumors

To know basic algorithm for diagnosis, treatment and follow-up of patients with retroperitoneal tumors. To recognise difference between malignant and benign retroperitoneal tumors

L7 - Diagnostic methods in urology

To know basic diagnostic methods in urology. To explain difference between different diagnostic methods.

L8 - Endoscopy in urology

To explain frequently used endoscopic methods and procedures in urology. To understand implementation of different endoscopic procedures

L9 - Benign prostatic tumors, infections of the prostate, prostate cancer

To recognise the most frequent benign tumor of the prostate (adenoma of the prostate - benign prostatic hyperplasia) and distinguish acute from chronic prostatitis. To understand treatment modalities of benign prostatic hyperplasia and prostatitis. To explain indications and contraindications for different treatment methods. To describe drug mechanisms for the treatment of benign prostatic hyperplasia. To explain pathogenesis and diagnostic methods for prostate cancer. To know treatment methods for prostate cancer. To know basic principles about follow-up of patients with prostate cancer

L10 - Kidney tumors

To know basic algorithm for diagnosis, treatment and follow-up of patients with kidney tumor. To know difference between malignant and benign tumors.

L11 - Urinary bladder tumors

To know basic algorithm for diagnosis, treatment and follow-up of patients with urinary bladder tumor. To know difference between malignant and benign tumors.

L12 - Urolithiasis

To explain and to know and describe different types of urolithiasis. To explain and to know basic principles of algorithms for diagnosis and treatment of urolithiasis

L13 - Congenital anomalies of the urinary system

To describe the most frequent anomalies of the urinary system and their treatment

L14 - Basics of kidney transplantation

To know basic principles about donor allocation, tissue typing, techniques of kidney transplantation and follow-up of patients with kidney transplant.

L15 - Infections of genitourinary tract

To define acute and chronic infection of the genitourinary tract. To understand transmission of the infection. To understand basic algorithms about treatment of infections of the genitourinary tract

Seminars list (with titles and explanation):

S1 - Diagnosis and treatment of urinary infections

To define acute and chronic infection of the genitourinary tract. To understand transmission of the infection. To understand basic algorithms about treatment of infections of the genitourinary tract

S2 - Early detection and treatment of kidney cancer

To explain pathogenesis and methods of early detection of kidney cancer. To know methods for the treatment of kidney cancer. To know basic principles of follow-up for patients with kidney cancer after curative treatment

S3 - Treatment of advanced bladder cancer

To know basic principles of treatment for patients with advanced bladder cancer. To know importance of multidisciplinary team for the treatment of the advanced bladder cancer.

S4 - Differential diagnosis of microhematuria

To know all conditions and diseases who possible lead to microhematuria. To know basic algorithms for diagnostic assessment of microhematuria.

S5 - Early detection and treatment of prostate cancer

To understand the methods for early detection of prostate cancer.

Practicals list (with titles and explanation):

P1-4 - Medical history and physical examination of urologic patient

To know how to take medical history and perform physical examination of urologic patient.

P5-8 - Medical history and physical examination of urologic patient

To know how to take medical history and perform physical examination of urologic patient.

P9-12 - Urinary derivation (urinary catheter, percutaneous nephrostomy, ureteral stent)

To recognise the most frequent types of urinary derivations. To put urinary catheter in male and female.

P13-16 - Ultrasound and RTG in urology

To know difference between mostly used imaging methods in urology. To participate during ultrasound examination of urologic patients.

P17-20 - Endourology

To recognise principle endourological instruments. To see basic endourological procedures on patients.

P21-22 - Endourology

To recognise principle endourological instruments. To see basic endourological procedures on patients.

Student obligations:

Attendance on lectures and practicals is mandatory. Communication between the teaching staff and students will take place on Merlin e-learning system or by e-mail addresses (@uniri.hr)

Exam (exam taking, description of the written/oral/practical part of the exam, point distribution, grading criteria):

Student assessment is carried out in accordance with the current University of Rijeka Study Regulations and the Student Regulations at the Faculty of Medicine Rijeka (adopted by the Faculty Council of the Faculty of Medicine Rijeka). Students' performance will be evaluated during the course and at the final exam. Out of a total of 100 credits, a student can earn 50 credits (50%) during the course, and 50 credits (50%) at the final exam. Student assessment is performed using ECTS (A-F) and number system (1-5). Student assessments in ECTS system is carried out by is performed by absolute distribution, and according to graduate assessment criteria. Out of a total of 50 credits that can be earn during the course, student must earn 25 credits to take final exam. Students with total of 24.9 credits and less (F assessment) must repeat the course. The student acquires grade points by completing the tasks as follows :

- During the course (obligatory written test) up to 50 credits
- Final exam up to 50 credits

I. During the course (maximum 50 credits): a) Obligatory test (maximum 50 credits) At the end of the course student solve written test of 70 questions with maximum of 50 credits. To earn the credits student must pass 50% (more than 36 correct answers), and correct asnwrs are converted in credits by the following criteria:

Correct answers	Credits
70	50
69	49
68	48
67	47
66	46
65	45
64	44
63	43
62	42
61	41
60	40
59	39
58	38
57	37
56	36
55	35
53,54	34
51, 52	33
49, 50	32
47, 48	31
45, 46	30
43, 44	29
41, 42	28
39, 40	27
37, 38	26
35, 36	25
25 - 34	10
10 - 24	5
1 - 9	0

Every student can be absent up to 30% of

1. LECTURES - it is possible to miss 5 hours;
2. SEMINARS - it is possible to miss 2 hours;
3. PRACTICALS - it is possible to miss 7 hours.

Final exam:

Evaluation of students is carried out according to the current University of Rijeka Study Regulations and the Ordinance on Student Assessment and Evaluation at the Faculty of Medicine in Rijeka (adopted by the Faculty Council of the Faculty of Medicine in Rijeka). Students are evaluated according to the ECTS (%/A-F) and numerical grading system (1-5). Student work is assessed and evaluated during the course and on the final exam. Out of 100 grade points, the student can obtain 50 grade points during classes and 50 grade points on the final exam.

Who can take the final exam:

According to the regulations, a student who has mastered all seven mandatory clinical skills during the course and achieved 25 - 50 grade points on the written part must take the final exam. At the final exam, a student can reach a maximum of 50 grade points.

Who cannot take the final exam:

Students who did not complete all seven mandatory clinical skills, students who obtained less than 25 grade points on the written part of the exam, and students who have more than 30% absences from classes cannot take the final exam. Such a student is unsuccessful (1) F and cannot take the final exam, i.e. he must re-enroll the course in the following academic year.

II. The final assessment is sum of ECTS credits during course and on final exam: Final assessment A (90-100%, e.g. 90-100 credits) EXCELLENT (5) B (75-89.9%, e.g. 75-89 credits) VERY GOOD (4) C (60-74.9%, e.g. 60-74 credits) GOOD (3) D (50-59.9%, e.g. 50-59 credits) SUFFICIENT (2) F (50 credits or not pass final exam) INSUFFICIENT (1)

Other notes (related to the course) important for students:

Course content and all information related to the course as well as exam dates can be found on the Merlin e-learning system and on the web pages of the Department of Urology. All student inquiries, regarding the course and possible problems, remarks and inquiries are provided exclusively using the official e-mail addresses (@medri.uniri.hr) or via the Merlin e-learning system. It is possible to arrange consultations with the teaching staff during working hours

COURSE HOURS 2024/2025

Urology

Lectures (Place and time or group)	Practicals (Place and time or group)	Seminars (Place and time or group)
01.10.2024		
L1 – Introduction to the course and historical review: • P5-111 (08:30 - 10:45) ^[173] ◦ U_388 L2 – The symptoms of urologic conditions: • P5-111 (08:30 - 10:45) ^[173] ◦ U_388 L3 – Emergency conditions in urology: • P5-111 (08:30 - 10:45) ^[173] ◦ U_388	P1-4 – Medical history and physical examination of urologic patient: • Department of Urology (11:00 - 14:00) ^[1069] ^{[400] [401] [402] [405] [407] [409] [1619] [1787] [1881] [1882] [1883] [2307]} ◦ U_388	
naslovni doc. dr. sc. Ahel Juraj, dr. med. ^[405] · naslovna asistentica Bukša Iva, dr. med. ^[1069] · nasl. izv. prof. dr. sc. Gršković Antun, dr. med. ^[402] · asistent Jakšić Ante, dr. med., FEBU ^[1881] · naslovni doc.dr.sc. Krpina Kristian, dr.med. ^[1787] · prof. dr. sc. Markić Dean, dr. med. ^[400] · prof.dr.sc. Oguić Romano, dr.med. ^[401] · naslovni asistent Rahelić Dražen, dr. med. ^[407] · naslovna asistentica Smolić Klara, dr. med. ^[1882] · naslovni doc.dr.sc. Sotošek Stanislav, dr.med. ^[1619] · naslovni asistent Srok Dorian, dr. med. ^[2307] · naslovni asistent Sušanjan Ivan Marin, dr. med. ^[1883] · naslovni asistent Trošelj Marin, dr. med. ^[409] · prof. dr. sc. Španjol Josip, dr. med. ^[173]		
03.10.2024		
L4 – Pathology of scrotum and penis: • P5-111 (08:30 - 10:00) ^[402] ◦ U_388 L5 – Male sterility and erectile dysfunction: • P5-111 (08:30 - 10:00) ^[402] ◦ U_388 L6 – Retroperitoneal tumors: • P5-111 (08:30 - 10:00) ^[402] ◦ U_388 • P5-111 (10:00 - 10:45) ^[1619] ◦ U_388	P5-8 – Medical history and physical examination of urologic patient: • Department of Urology (11:00 - 14:00) ^[173] ^{[400] [401] [402] [405] [407] [409] [1069] [1619] [1787] [1881] [1882] [1883] [2307]} ◦ U_388	
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08.10.2024		
L7 – Diagnostic methods in urology: • P5-111 (08:30 - 10:45) ^[173] ◦ U_388 L8 – Endoscopy in urology: • P5-111 (08:30 - 10:45) ^[173] ◦ U_388 L9 – Benign prostatic tumors, infections of the prostate, prostate cancer: • P5-111 (08:30 - 10:45) ^[173] ◦ U_388	P9-12 - Urinary derivation (urinary catheter, percutaneous nephrostomy, ureteral stent): • Department of Urology (11:00 - 14:00) ^[173] ^{[400] [401] [402] [405] [407] [409] [1069] [1619] [1787] [1881] [1882] [1883] [2307]} ◦ U_388	

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10.10.2024		
L10 – Kidney tumors: • P12 - KBC SUŠAK (08:00 - 08:45) ^[401] ◦ U_388 L11 – Urinary bladder tumors: • P12 - KBC SUŠAK (08:45 - 09:30) ^[1787] ◦ U_388 L12 - Urolithiasis: • P12 - KBC SUŠAK (09:30 - 10:15) ^[173] ◦ U_388	P13-16 - Ultrasound and RTG in urology: • Department of Urology (10:30 - 13:30) ^[2307] ^[400] ^[401] ^[402] ^[405] ^[407] ^[409] ^[1069] ^[1619] ^[1787] ^[1881] ^[1882] ^[1883] ◦ U_388	
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15.10.2024		
L13 – Congenital anomalies of the urinary system: • P5-112 (08:30 - 10:00) ^[400] ◦ U_388 L14 – Basics of kidney transplantation: • P5-112 (08:30 - 10:00) ^[400] ◦ U_388 L15 – Infections of genitourinary tract: • P5-112 (10:00 - 10:45) ^[405] ◦ U_388	P17-20 - Endourology: • Department of Urology (11:00 - 14:00) ^[400] ^[401] ^[402] ^[405] ^[407] ^[409] ^[1069] ^[1619] ^[1787] ^[1881] ^[1882] ^[1883] ^[2307] ◦ U_388	
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17.10.2024		

	P21-22 - Endourology: • Department of Urology (12:00 - 13:15) ^[173] [400] [401] [402] [405] [407] [409] [1069] [1619] [1787] [1881] [1882] [1883] [2307] ◦ U_388	S1 - Diagnosis and treatment of urinary infections: • P12 - KBC SUŠAK (08:00 - 08:45) [405] ◦ U_388 S2 - Early detection and treatment of kidney cancer: • P12 - KBC SUŠAK (08:45 - 09:30) [402] ◦ U_388 S3 - Treatment of advanced bladder cancer: • P12 - KBC SUŠAK (09:30 - 10:15) [401] ◦ U_388 S4 - Differential diagnosis of microhematuria: • P12 - KBC SUŠAK (10:15 - 11:45) [173] ◦ U_388 S5 - Early detection and treatment of prostate cancer: • P12 - KBC SUŠAK (10:15 - 11:45) [173] ◦ U_388
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List of lectures, seminars and practicals:

LECTURES (TOPIC)	Number of hours	Location
L1 - Introduction to the course and historical review	1	P5-111
L2 - The symptoms of urologic conditions	1	P5-111
L3 - Emergency conditions in urology	1	P5-111
L4 - Pathology of scrotum and penis	1	P5-111
L5 - Male sterility and erectile dysfunction	1	P5-111
L6 - Retroperitoneal tumors	1	P5-111
L7 - Diagnostic methods in urology	1	P5-111
L8 - Endoscopy in urology	1	P5-111
L9 - Benign prostatic tumors, infections of the prostate, prostate cancer	1	P5-111
L10 - Kidney tumors	1	P12 - KBC SUŠAK
L11 - Urinary bladder tumors	1	P12 - KBC SUŠAK
L12 - Urolithiasis	1	P12 - KBC SUŠAK
L13 - Congenital anomalies of the urinary system	1	P5-112
L14 - Basics of kidney transplantation	1	P5-112
L15 - Infections of genitourinary tract	1	P5-112

PRACTICALS (TOPIC)	Number of hours	Location
P1-4 - Medical history and physical examination of urologic patient	4	Department of Urology
P5-8 - Medical history and physical examination of urologic patient	4	Department of Urology
P9-12 - Urinary derivation (urinary catheter, percutaneous nephrostomy, ureteral stent)	4	Department of Urology
P13-16 - Ultrasound and RTG in urology	4	Department of Urology
P17-20 - Endourology	4	Department of Urology
P21-22 - Endourology	2	Department of Urology

SEMINARS (TOPIC)	Number of hours	Location
S1 - Diagnosis and treatment of urinary infections	1	P12 - KBC SUŠAK
S2 - Early detection and treatment of kidney cancer	1	P12 - KBC SUŠAK
S3 - Treatment of advanced bladder cancer	1	P12 - KBC SUŠAK
S4 - Differential diagnosis of microhematuria	1	P12 - KBC SUŠAK
S5 - Early detection and treatment of prostate cancer	1	P12 - KBC SUŠAK

EXAM DATES (final exam):

1.	23.10.2024.
2.	20.02.2025.
3.	03.07.2025.
4.	02.09.2025.
5.	16.09.2025.