[Medicinski fakultet u Rijeci]

Curriculum
2024/2025

[Za kolegij]

Infectology with Clinical Microbiology

Study program:	**Medical Studies in English (R)** [Sveučilišni integrirani prijediplomski i diplomski studij]
Department:	**[Katedra za zarazne bolesti]**
Course coordinator:	**izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med.**
Year of study:	**4**
ECTS:	**8**
Incentive ECTS:	**0 (0.00%)**
Foreign language:	**Possibility of teaching in a foreign language**

Course information:

“Infectious diseases and clinical microbiology” course comprises general matter: pathogenesis and etiology of infectious diseases, epidemiology of infectious diseases, clinical course of an infective disease and general signs and symptoms of an infectious disease as well as immune response to infective agent, diagnostic techniques used in infectious diseases and antimicrobial treatment. Specific matter in infectious diseases covers infectious diseases syndromes and infections of particular organic systems: respiratory tract infections, gastrointestinal infections, hepatibiliary tract infection, central nervous system infections, skin, bone, joint and soft tissue infections, urinary tract infections, bloodstream infections and sepsis. More, this course covers fever with rash, fever of unknown origin, zoonoses, and infections in immunocompromised patients and healthcare-associated infections. Protozaoal infections, infections with anaerobic bacteria, HIV infection and other causative agents in infectious diseases are covered in this course. Separately, immunization and vaccines are emphasized as a key component of infectious disease burden control.

This course appends the matter of previous courses like internal medicine, physiology, pathophysiology, immunology, pharmacology, pathology and microbiology.

Lessons are organizes as lectures, seminars anf practical excercises wich mutually interfere and append and all forms of lessions are obligatory to master the course.

Seminars are integrated with seminars in clinical microbiology and present a learning unit. Microbiological part of the seminar covers pathogenesis of a particular infectious disease, virulence factors of pathogens and immune response pathways in order to resolve infection. Infectious diseases specialist guides second part of the seminar in order to present the clinical signs and symptoms of previously presented infectious disease, either in a bedside manner or as a case-report.

Students will be provided with all lectures synopses

Lectures will be held in main lecture room of The Clinical hospital center Rijeka and lecture room of Clinic for infectious diseases. Seminars will be held in a lecture room of Clinic for infectious diseases. Practical exercises will be performed in the Clinic for infectious diseases, Clinical hospital center Rijeka. All forms of lessions are obligatory, as regulated by Statue of the Faculty of Medicine in Rijeka.

List of assigned reading:

Southwick FS. Infectious Diseases: Clinical Short Course, 4 th Ed. McGraw Hill Education, 2020.

List of optional reading:

Harrison´s Principles of Internal Medicine, 20th Ed. McGraw Hill Education, 2018. Mandell, Douglas, and Bennett´s Principles and Practice of Infectious Diseases, 9th Ed. Churchill, Livingstone (Elsevier), 2020 Red book: 2021-2024 Report of the Committee on Infectious Diseases 32nd Ed. Itasca, IL, American Academy of Pediatrics, 2021.

Curriculum:

[Vježbe] list (with titles and explanation):

PW1 Adult patient with an infectious disease (history of the disease, epidemiology, clinical status)

Learn how to take anamnesis from a patient, including epidemiological data, which can point to final diagnosis. Learn how to perform complete physical exam of a patient with an infectious disease, how to examine meningeal signs, how to perform full oral cavity exam and detailed skin exam

PW2 Child with an infectious disease (history of the disease, epidemiology, clinical status)

Learn the specificities of pediatric anamnesis (course of pregnancy and delivery, early childhood development, vaccination status). Learn how to perform physical exam in a child.

PW3 Collection of tissue samples for microbiology analysis, interpretation of results. Clinical microbiology laboratory work.

Learn how to perform oral cavity examination and how to collect oropharyngeal and nasopharyngeal swab sample. Based on oral cavity examination status learn how to differentiate between viral and bacterial pharyngitis, and herpangina from herpesvirus stomatitis. Learn how to properly diagnose BHS-A pharyngitis, how to differentiate between colonization and infection. Learn how to properly interpret the results form microbiology analysis of OF / NF swab sample.

PW4 Physical exam of a patient with suspected infection of central nervous system – importance of meningeal signs

Learn how to peform neurological status of a patient with emphasis on meningeal signs. Identify specific clinical signs and symptoms of central nervous system infection. See the process of proper preparation and performance of lumbal puncture. Learn how to properly interpret the results of cell-, biochemicaland microbiological- analysis of cerebrospinal fluid. Learn the etiology and clinical course of aseptic and bacterial meningitis

PW5 Physical exam of a patient with suspected infection of respiratory system

Learn how to perform physical examination of chest with emphasis on auscultation of heartbeats and respiratory phenomena. Establish clinical diagnosis of respiratory tract infection and suggest appropriate biochemical and haematology analysis. Learn to recognize specific alterations in chest X-ray that indicate pneumonia. Learn how to properly perform epidemiological anamnesys in patients with respiratory system infections.

PW6 Physical exam of a patient with suspected infection of cardiovascular system

Learn which are the clnical syndromes that urge obtaining blood culture samples. Learn how to adequately obtain and process blood cultures in oder to avoid false positive results. Learn proper interpretation of the blood cultures results in accordance to blood analysis (levels of inflammatory response). Learn how to diagnose infective endocarditis (Duke´s cryteria) and know the most common agents that cause iE

PW7 Physical exam of a patient with suspected infection of gastrointestinal system

Learn how to discriminate between clinical sydromes enteritis, colitis, gastroenteritis, enterocolitis and gastroenterocolitis according to presented symptoms of the syndrome. Learn how to interpret the results of stools macro- and mycroscopic analysis in accordance to etiology of diarrhea (bacteria / virus /parasytes / fungi). Learn which non-infective syndroms are included in differential diagnosis of acute diarrheal syndrome. Learn the basis of supportive therapy of acute diarrhea and is in when is appropriate to introduce antibiotics in therapy

PW8 Physical exam of a patient with suspected infection of liver and bile duct

Learn the symptoms of hepatobiliary tract infections. Learn how to interpret results of hepatogramme and serology tests in virus hepatitis. Know which syndromes are included in differential diagnosis of icterus. Learn about epidemiology and prevention of viral hepatitis

PW9 Physical exam of a patient with suspected lymphoreticular system infection

Learn how to perform the examination of liymph nodes in patients. Know how to interpret the results of cytology analysis of lymph nodes. Learn the differential diagnosis of lymphadenitis

PW10 Physical exam of a patient with suspected infection of urinary system

Learn how to proprerly obtain urin sample for microbiological analysis. Learn how to obtain prostate exprimate nad

uretral swab. Learn proper interpretation of microbiological and cytological urine analysis results. Know how to differentiate between different clinical syndromes of urinary tract infection based on presented symptoms of the disease.

[Predavanja] list (with titles and explanation):

L1 Introduction to infectious diseases

Learn the principles of infectious diseases: evolution and course of an infective disease, general and specific signs and symptoms of ID. Learn how to prevent an infectious disease (chemoprophylaxis, immunoprophylaxsis)

L2 Diagnostics of infectious diseases

Learn how to collect samples from a patient relevant for the diagnosis of an infectious disease, transport and storage of samples. Learn how to direct diagnostic procedures depending on presented signs and symptoms of ID and time passed from disease onset. Correlate laboratory analysis results with ID syndromes, know how to interprete results of serological or molecular analysis in order to establish the etiology of an ID

L3 Anti-infective therapy

Learn the principles of antiinfective therapy, pharmacokynetics and pharmacodynamics of antimicrobial drugs, sidefects and interactions with other medications. Learn all groups of antibiotics and mechanisms of action. Learn indications for introduction of specific antibiotic and develop critical opinion about prescriptions of antibiotics.

L4 Infections of the Gastrointestinal system

Learn about etiology, pathogenesis, epidemiology, clinical presentation, diagnostics, therapy (both supportive and antimicrobial), and prevention of GIT infections. Learn how to differentiate non-infective from infective diarrhea

L5 Virus hepatitis

Learn how to differentiate infective and non-infective hepatitis, understand the term „reactive hapatitis“. Learn which are the hepatotropic viruses, their etiology, epidemiology, pathogenesis, clinical presentation, diagnostics and treatment. Learn how to diagnose and treat chronic HBV and HCV hepatitis.Learn pre and post-exposure measurements od HBV infection. Learn how to prevent the spread of virusesthat cause virus hepatitis

L6 Infections of the Respiratory system

Learn about etiology, pathogenesis, epidemiology, clinical presentation, diagnostics, therapy, and prevention of respiratory infections. Learn how to differentiate and treat atypic and typic pneumonia. Learn about seasonal influenza and novel coronaviruses (SARS-CoV, MERS, SARS-CoV-2)

L7 Infections caused by Streptococci and Angina

Learn how to diagnose angina and differentiate between viral and bacterial angina. Learn about all clinical syndromes caused by Streptococci. Learn about pathogenesis, clinical presentation, diagnostics and therapy of infections caused by Streptococci

L8 Infections caused by Staphylococci, Toxic shock syndrome

Learn about pathogenesis, clinical presentation, diagnosis and treatment od infections caused by Staphylococci. Learn how to diagnose and treat infections caused by Staphylococci. Learn which antimicrobials are effective for Staphylococcal infections and mechanisms of antimicrobial resistance developed by Staphylococci.

L9 Infections of the Central nervous system

Learn about etiology, epidemiology, pathogenesis, clinical course, diagnostics and treatment (antimicrobial and supportive) of CNS infections. Learn how to make clinical distinguish between infective meningitis and meningismus. Learn which antimicrobials to use in chemoprophylaxis of CNS infections.

L10 Fever with rash

Learn about etiology, epidemiology, pathogenesis, clinical course, diagnostics and treatment of infections with rash in pediatric population. Learn how to differentiate between different eflorescenses, learn about of the eflorescense distribution and evolution within the course of infections with rash

L11 Immunoprophylaxis, vaccination

Learn about the mechanisms of immunoprophylaxis. Memorize official immunization schedule in Croatia. Learn about vaccination in special circumstances.

L12 Herpes-virus infections

Learn about herpesviruses, epidemiology and clinical manifestations of infections caused by herpesviruses. Learn how to diagnose, treat and prevent single herpesvirus infection (from HHV-1 to HHV-8). Learn about coplications and long-term sequelae of herpesvirus infections.

L13 Sepsis, Fever of unknown origin

Learn how to diagnose sepsis and sepsis complications (septic shock, multiorgan failure). Learn about etiology, clinical course, treatment of community-acquired, and intrahospital sepses. Learn how to establish the diagnosis of Fever of Unknown Origin and entities that cause FUO.

L14 Urinary tract infections

Learn about etiology, epidemiology, pathogenesis, clinical course and treatment of urinary tract infections; community- and intrahospital-acquired. Learn how to distinguish between asymptomatic bacteriuria and UTI.

L15 Zoonoses

Learn about epidemiology of zoonoses. Memorize most important zoonoses in human medicine (etiology, pathogenesis, clinical course and treatment). Learn about epidemics of individual zoonosis in Croatia

L16 Infections caused by Spirochaete

Learn about etiology, epidemiology, and pathogenesis. Clinical course, diagnosis and treatment ofsyphilism leptospirosis and Lyme disease.

L17 Tropical diseases, Infections caused by parasytes

Learn about global distribution of tropical diseases and importance of these diseases in terms of international travel and migrations. Learn about etiology, epidemiology, pathogenesis, clinical course and treatment of most frequent parasyte infections in Croatia

L18 Infections caused by anaerobic bacteria

Learn the etiology, pathogenesis, clinical course and treatment of infections caused by anaerobic bacteria with emphasis on recognition of anaerobic infections within specific organ sysems. Learn about epidemiology, pathogenesis, clinical course, treatment and prevention of tetanus and botulism. Learn about pre- and post-exposure tetanus prophylaxis.

L19 HIV

Learn the epidemiology, pathogenesis, biology, clinical course and treatment of HIV infection; Learn AIDSindicative diseases and conditions. Learn about the protocol of management of HIV+ patients in Croatia

L20 Infections in immunocompromised host

Learn the components of innate and adaptive immunity that interact with infectious pathogens and diseases that outcome from immunospupression (either genetic or therapy-induced). Learn about infections in splenectomized patients and modes of their prevention.

[Seminari] list (with titles and explanation):

S1 Principles of infectious diseases pathogenesis and diagnosis

Learn the pathogenesis models of infectious diseases and principles of pathogen proof. Learn how to extract human samples for microbiological analysis. Learn how to properly transport or store samples in order to perform analysis. Define the changes in biochemical and hematology values depending on the etiology of infectious disease. Discriminate between molecular and serology tests used to diagnose infectious pathogens. Learn how to interpret results of bacterial cultures and related antibiogram.

S2 Diagnosis of infectious diseases - Practical examples

Learn the pathogenesis models of infectious diseases and principles of pathogen proof. Learn how to extract human

samples for microbiological analysis. Learn how to properly transport or store samples in order to perform analysis. Define the changes in biochemical and hematology values depending on the etiology of infectious disease. Discriminate between molecular and serology tests used to diagnose infectious pathogens. Learn how to interpret results of bacterial cultures and related antibiogram.

S3 Infections of the gastrointestinal system and oral cavity

Learn epidemiology and pathogenesis of gastrointestinal infections; differentiate between infectious and non-infectious causes of diarrhea. Learn te principles of epidemiology anamnesis in patients with gastrointestinal infection; discriminate between viral and bacterial pathogens as possible cause of infectious diarrhea based on biochemical and hematologic values in blood of infected patients. Leran how to diagnose, differentiate the stage of and treat dehydration. Determine proper diet in patients with gastrointestinal infection

S4 Patient with gastrointestinal infection – case report

Learn epidemiology and pathogenesis of gastrointestinal infections; differentiate between infectious and non-infectious causes of diarrhea. Learn te principles of epidemiology anamnesis in patients with gastrointestinal infection; discriminate between viral and bacterial pathogens as possible cause of infectious diarrhea based on biochemical and hematologic values in blood of infected patients. Leran how to diagnose, differentiate the stage of and treat dehydration. Determine proper diet in patients with gastrointestinal infection

S5 Infections of the liver and hepatobiliary system

Learn the etiology of acute hepatitis. Recognize tipical changes in biochemical values in blood of patients with hepatitis. Learn how to diagnose viral hepatitis usin serologic and molecular methods. Learn how to prevent viral hepatitis. Interpret the results of hepatobiliary ultrasound analysis. Differentiate between infectious and non-infectious hepatitidies.

S6 Patient with viral hepatitis or infection of the hepatobiliary system – case report

Learn the etiology of acute hepatitis. Recognize tipical changes in biochemical values in blood of patients with hepatitis. Learn how to diagnose viral hepatitis usin serologic and molecular methods. Learn how to prevent viral hepatitis. Interpret the results of hepatobiliary ultrasound analysis. Differentiate between infectious and non-infectious hepatitidies.

S7 Infections of the Respiratory system

Learn etiology, epidemiology, pathogenesis, clinical course, diagnostics and treatment of respiratory infections. Learn how to differentiate between typical and atypical pneumonia based on patients´ anamnesis, radiological scans and hematology and biochemical values. Differentiate flu and cold. Learn abot the complications of the flu

S8 Patient with respiratory tract infection – case report

Learn etiology, epidemiology, pathogenesis, clinical course, diagnostics and treatment of respiratory infections. Learn how to differentiate between typical and atypical pneumonia based on patients´ anamnesis, radiological scans and hematology and biochemical values. Differentiate flu and cold. Learn abot the complications of the flu.

S9 Infections of the skin and skeletal system

Learn the etiology, pathogenesis, clinical and clinical course of most frequent infections of the skeletal system. Learn about the diagnostic tools appropriate for diagnosis of skeletal system infections. Learn differential diagnosis of “back pain”. Learn how to interpret biochemical and hematology results in the diagnostic process of sceletal system infections.

S10 Patient with skin or skeletal system infection – case report

Learn the etiology, pathogenesis, clinical and clinical course of most frequent infections of the skeletal system. Learn about the diagnostic tools appropriate for diagnosis of skeletal system infections. Learn differential diagnosis of “back pain”. Learn how to interpret biochemical and hematology results in the diagnostic process of sceletal system infections.

S11 Infections of the Central nervous system

Learn to differentiate age-related etiology of bacterial meningitis. Learn about the pathogenesis of CNS infections. Differentiate between para- and post-infective encephalitis. Recognize characteristic physical signs of meningitis. Learn empiric therapy of bacterial meningitis. Defferentiate between meningismus and meningitis. Learn how to interpret results of cerebrospinal fluid cytologic and biochemical analysis.

S12 Patient with Central nervous system infection – case report

Learn to differentiate age-related etiology of bacterial meningitis. Learn about the pathogenesis of CNS infections. Differentiate between para- and post-infective encephalitis. Recognize characteristic physical signs of meningitis. Learn empiric therapy of bacterial meningitis. Defferentiate between meningismus and meningitis. Learn how to interpret results of cerebrospinal fluid cytologic and biochemical analysis.

S13 Congenital and neonatal infections

Learn the etiology, pathogenesis, diagnosis and treatment of congenital (TORCH) nad neonatal infections. Learn how to perform prenatal serological screening in pregnant women in order to prevent congenital and neonatal infections

S14 Patient with congenital or neonatal infection – case report

Learn the etiology, pathogenesis, diagnosis and treatment of congenital (TORCH) nad neonatal infections. Learn how to perform prenatal serological screening in pregnant women in order to prevent congenital and neonatal infections.

S15 Infections of te Urinary system and sexually-transmitted diseases

Learn the etiology of community-acquired UTI, clinical course, diagnostics and treatment protocols. Learn how to interpret results of cyto- and biochemical urine analysis and microbiological urine cultures with associated antibiograms. Learn the etiology, pathogenesis, clinical course and treatment of STDs. Learn prophylactic protocols for STDs

S16 Patient with urinary tract infection or STD – case report

Learn the etiology of community-acquired UTI, clinical course, diagnostics and treatment protocols. Learn how to interpret results of cyto- and biochemical urine analysis and microbiological urine cultures with associated antibiograms. Learn the etiology, pathogenesis, clinical course and treatment of STDs. Learn prophylactic protocols for STDs.

S17 Bloodstream infections, infection of the lymphoreticular system

Learn the etiology of bacteraemia and sepsis, clinical presentation of sepsis, diagnostics and treatment protocols. Learn about infectious mononucleosis syndrome.

S18 Patient with bloodstream infection or lymphoreticular system infection – case report

Learn the etiology of bacteraemia and sepsis, clinical presentation of sepsis, diagnostics and treatment protocols. Learn about infectious mononucleosis syndrome.

S19 Healthcare-associated infections

Know the most frequent etiological agents of HAI. Learn the protocols of HAI prevention and management. Learn about the measures of detecting and follow up of bacterial antimicrobial resistance in Croatia. Understand the mechanisms of antimicrobial resistance in specific pathogens (MRSA, ESBL+ microorganisms, VRE etc.)

S20 Patient with healthcare-associated infection – case report

Know the most frequent etiological agents of HAI. Learn the protocols of HAI prevention and management. Learn about the measures of detecting and follow up of bacterial antimicrobial resistance in Croatia. Understand the mechanisms of antimicrobial resistance in specific pathogens (MRSA, ESBL+ microorganisms, VRE etc.)

Student obligations:

All forms of classes are obligatory. Student has not fulfilled the requirements prescribed by the study programme, in case he/she was absent more than 30% of the course hours in all the course sections (lectures, seminars or practical work). These students must enroll again in the course in the next academic year. Student that has ≤30% of seminars or practical work default need to compensate the practical work in other time point or to pass the preliminary exam of the default seminar.

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

1. Students evaluations will be conducted according to the Ordinance on Student Grading at the faculty of Medicine in Rijeka

2. Total percentage of students´ success during the course constitutes up to 60% of the grade and 40% passing the final exam.

During the course student constitutes max. up to 60 % of the grade via 2 small exams formed as an essay. Each essay contains 5 (five) themes that students answer in writing in period of 60 minutes. Small test essays will be conducted during the ordinary session and students can achieve up to 30% of grade on each.

3. Students who achieve ≥30 % of the final grade can take final exam.

In the final exam the maximum is 40%.

I. 35-40% Excellent (5)
II. 30-34% Very good (4)
III. 25-29% Good (3)
IV. 20-24% Sufficient (2)

Final exam is constituted from practical and oral part. Total credits at the final exam may be max. 40%.

Pass grades:

1. 90-100% (5), A Excellent
2. 75-89,9% (4), B Very good
3. 60-74,9% (3), C Good
4. 50-59,9% (2), D, Sufficient
5. 0-49,9% (1), F Insufficient

Before taking the final exam student must present his Transcript of records signed by the Head of the course.

4. Student who has achieved ≤30 % of the final grade don´t have the right to take the final exam and must enroll again in the course in the next academic year.

5. All forms of classes are obligatory. Student has not fulfilled the requirements prescribed by the study programme, in case he/she was absent more than 30% of the course hours in all the course sections. These students must enroll again in the course in the next academic year.

6. Student that has ≤30 % of seminars or practical work default need to compensate the practical work in other time point or to pass the preliminary exam of the default seminar.

7. First exam essay includes principles of infectious diseases (Infectious diseases in general), Diagnostics and Therapy of infectious diseases. First exam essay will be held on March 17 th 2025 at 08:00 am in the lecture room of the Clinical hospital center Rijeka.

8. Second exam essay´s themes are Infections caused by Streptococci, Infections caused by Staphylococci, Respiratory tract infections, Infections of the gastrointestinal system and Viral hepatitis. Second exam essay will be held on March 31 st 2025 at 08:00 am in the lecture room of the Clinical hospital center Rijeka.

9. Repeat examination for one of exam essays will be held at single time point between two time dates of final exames for students who achieved ≤30 % of the final grade and those who were unable to attend exam essay due to illness. Repeat examination contains themes of the exam essay at which the student scored inferior result. Student can retake only ONE exam essay. Students who have achieved ≤30 % of the final grade after repeat examination don´t have the right to take the final exam and must enroll again in the course in the next academic year.

10. Final exam dates are 23.4.2025.; 17.06.2025., 07.07.2025., 09.09.2025. and 23.09.2025. The final exam results will be published on the web pages and on the notice board.

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

All changes in course programme and important informations regarding the Course will be announced on the web pages and on the notice board of the Department of infectous diseases placed in the atrium of the Clinic for infectious disease, Clinical Hospital Centre Rijeka. Time dates and hours for students consultations with lecturers, students personally arrange with the lecturer via e-mail or on site. Department´s officer Sanja Rivetti is available from Monday to Friday in period 8-12 am, contact phone number. +385 51 658 271; e-mail: infektologija@kbc-rijeka.hr

COURSE HOURS 2024/2025

Infectology with Clinical Microbiology

[Predavanja] (Place and time or group)	**[Vježbe]** (Place and time or group)	**[Seminari]** (Place and time or group)
26.02.2025		
L1 Introduction to infectious diseases: • [P10 - INFEKTOLOGIJA] (08:00 - 10:15) [288] ○ IDWCM		
izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288]		
28.02.2025		

L3 Anti-infective therapy:
• [P10 - INFEKTOLOGIJA] (08:00 - 10:15) [288]
  ○ IDWCM
		S1 Principles of infectious diseases pathogenesis and diagnosis:
		• [P10 - INFEKTOLOGIJA] (10:30 - 12:45) [250]
		  ○ IDWCM
		
		S2 Diagnosis of infectious diseases - Practical examples:
		• [P10 - INFEKTOLOGIJA] (13:00 - 14:30) [288]
		  ○ IDWCM

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · prof. dr. sc. Gobin Ivana, dipl. sanit. ing. [250]		
04.03.2025		

	PW1 Adult patient with an infectious disease (history of the disease, epidemiology, clinical status):
	• [Klinika za infektivne bolesti] (10:30 - 13:30) [288] [291] [289]
	  ○ PWa3
	  ○ PWa2
	  ○ PWa1
	• [Klinika za infektivne bolesti] (13:30 - 16:30) [288] [291] [289]
	  ○ PWa6
	  ○ PWa5
	  ○ PWa4	

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
05.03.2025		
L2 Diagnostics of infectious diseases: • [P10 - INFEKTOLOGIJA] (08:00 - 10:15) [153] ○ IDWCM		
prof. dr. sc. Abram Maja, dr. med. [153]		
06.03.2025		

	PW2 Child with an infectious disease (history of the disease, epidemiology, clinical status):
	• [Klinika za infektivne bolesti] (13:30 - 16:30) [291] [288] [289]
	  ○ PWa1
	  ○ PWa2
	  ○ PWa3	

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
07.03.2025		

L4 Infections of the Gastrointestinal system:
• [P10 - INFEKTOLOGIJA] (08:00 - 10:15) [288]
  ○ IDWCM
	PW2 Child with an infectious disease (history of the disease, epidemiology, clinical status):
	• [Klinika za infektivne bolesti] (13:30 - 16:30) [288] [291] [289]
	  ○ PWa6
	  ○ PWa5
	  ○ PWa4	

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
10.03.2025		

	PW3 Collection of tissue samples for microbiology analysis, interpretation of results. Clinical microbiology laboratory work.:
	• [Klinika za infektivne bolesti] (10:30 - 13:30) [288] [291] [289]
	  ○ PWa6
	  ○ PWa5
	  ○ PWa4
	• [Klinika za infektivne bolesti] (13:30 - 16:30) [288] [291] [289]
	  ○ PWa3
	  ○ PWa2
	  ○ PWa1	

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
11.03.2025		

	PW4 Physical exam of a patient with suspected infection of central nervous system – importance of meningeal signs:
	• [Klinika za infektivne bolesti] (10:00 - 13:00) [291] [288] [289]
	  ○ PWa1
	  ○ PWa2
	  ○ PWa3
	• [Klinika za infektivne bolesti] (13:00 - 16:00) [289] [288] [291]
	  ○ PWa4
	  ○ PWa6
	  ○ PWa5	

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
12.03.2025		

L5 Virus hepatitis: • [P13 - ORL (otorinolaringologija)] (08:00 - 10:15) [289] ◦ IDWCM		S3 Infections of the gastrointestinal system and oral cavity: • [P13 - ORL (otorinolaringologija)] (10:30 - 12:45) [250] ◦ IDWCM S4 Patient with gastrointestinal infection – case report: • [P13 - ORL (otorinolaringologija)] (13:00 - 14:30) [288] ◦ IDWCM
izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · prof. dr. sc. Gobin Ivana, dipl. sanit. ing. [250] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
14.03.2025		
L6 Infections of the Respiratory system: • [P13 - ORL (otorinolaringologija)] (08:00 - 10:15) [288] ◦ IDWCM	PW5 Physical exam of a patient with suspected infection of respiratory system: • [Klinika za infektivne bolesti] (10:30 - 13:30) [288] [291] [289] ◦ PWa6 ◦ PWa5 ◦ PWa4 • [Klinika za infektivne bolesti] (13:30 - 16:30) [291] [288] [289] ◦ PWa1 ◦ PWa2 ◦ PWa3	
izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
19.03.2025		
L7 Infections caused by Streptococci and Angina: • [ONLINE] (08:00 - 10:15) [289] ◦ IDWCM		S5 Infections of the liver and hepatobiliary system: • [ONLINE] (10:30 - 12:45) [153] ◦ IDWCM S6 Patient with viral hepatitis or infection of the hepatobiliary system – case report: • [ONLINE] (13:00 - 14:30) [288] ◦ IDWCM
prof. dr. sc. Abram Maja, dr. med. [153] · izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
20.03.2025		
	PW6 Physical exam of a patient with suspected infection of cardiovascular system: • [Klinika za infektivne bolesti] (10:30 - 13:30) [288] [291] [289] ◦ PWa6 ◦ PWa5 ◦ PWa4 • [Klinika za infektivne bolesti] (13:30 - 16:30) [288] [291] [289] ◦ PWa3 ◦ PWa2 ◦ PWa1	
izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		

21.03.2025		
L8 Infections caused by Staphylococci, Toxic shock syndrome: • [P10 - INFEKTOLOGIJA] (08:00 - 10:15) [289] ◦ IDWCM		
izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
24.03.2025		

L9 Infections of the Central nervous system:
• [P10 - INFEKTOLOGIJA] (08:00 - 10:15) [288]
  ◦ IDWCM
 	
L10 Fever with rash:
• [P10 - INFEKTOLOGIJA] (10:30 - 12:45) [288]
  ◦ IDWCM		

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288]		
25.03.2025		

L11 Immunoprophylaxis, vaccination:
• [P10 - INFEKTOLOGIJA] (08:00 - 09:30) [288]
  ◦ IDWCM
		S7 Infections of the Respiratory system:
		• [P10 - INFEKTOLOGIJA] (10:00 - 12:15) [153]
		  ◦ IDWCM
		
		S8 Patient with respiratory tract infection – case report:
		• [P10 - INFEKTOLOGIJA] (12:30 - 14:00) [288]
		  ◦ IDWCM

prof. dr. sc. Abram Maja, dr. med. [153] · izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288]		
26.03.2025		

	PW7 Physical exam of a patient with suspected infection of gastrointestinal system:
	• [Klinika za infektivne bolesti] (10:00 - 13:00) [288] [291] [289]
	  ◦ PWa3
	  ◦ PWa2
	  ◦ PWa1
	• [Klinika za infektivne bolesti] (13:00 - 16:00) [288] [291] [289]
	  ◦ PWa6
	  ◦ PWa5
	  ◦ PWa4	

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27.03.2025		

L12 Herpes-virus infections:
• [P11 - KBC RI] (08:00 - 09:30) [289]
  ◦ IDWCM
	PW8 Physical exam of a patient with suspected infection of liver and bile duct:
	• [Klinika za infektivne bolesti] (10:00 - 13:00) [291] [288] [289]
	  ◦ PWa4
	  ◦ PWa5
	  ◦ PWa6
	• [Klinika za infektivne bolesti] (13:00 - 16:00) [288] [291] [289]
	  ◦ PWa3
	  ◦ PWa2
	  ◦ PWa1	

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28.03.2025		

L13 Sepsis, Fever of unknown origin:
• [P11 - KBC RI] (08:00 - 09:30) [289]
  ◦ IDWCM
		S9 Infections of the skin and skeletal system:
		• [P11 - KBC RI] (10:00 - 12:15) [153]
		  ◦ IDWCM
		
		S10 Patient with skin or skeletal system infection – case report:
		• [P11 - KBC RI] (12:30 - 14:00) [289]
		  ◦ IDWCM

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01.04.2025		

		S11 Infections of the Central nervous system:
		• [P10 - INFEKTOLOGIJA] (10:00 - 12:15) [153]
		  ◦ IDWCM
		
		S12 Patient with Central nervous system infection – case report:
		• [P10 - INFEKTOLOGIJA] (12:30 - 14:00) [288]
		  ◦ IDWCM

prof. dr. sc. Abram Maja, dr. med. [153] · izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288]		
02.04.2025		

L14 Urinary tract infections:
• [P11 - KBC RI] (08:00 - 09:30) [289]
  ◦ IDWCM
	PW9 Physical exam of a patient with suspected lymphoreticular system infection:
	• [Klinika za infektivne bolesti] (10:00 - 13:00) [291] [289] [288]
	  ◦ PWa2
	  ◦ PWa1
	  ◦ PWa3
	• [Klinika za infektivne bolesti] (13:00 - 16:00) [288] [291] [289]
	  ◦ PWa6
	  ◦ PWa5
	  ◦ PWa4	

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
03.04.2025		

L15 Zoonoses: • [P10 - INFEKTOLOGIJA] (08:00 - 09:30) [288] ○ IDWCM		
izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288]		
04.04.2025		

L16 Infections caused by Spirochaete:
• [P13 - ORL (otorinolaringologija)] (08:00 - 09:30) [288]
  ○ IDWCM
		S13 Congenital and neonatal infections:
		• [P10 - INFEKTOLOGIJA] (10:00 - 12:15) [153]
		  ○ IDWCM
		S14 Patient with congenital or neonatal infection – case report:
		• [P10 - INFEKTOLOGIJA] (12:30 - 14:00) [288]
		  ○ IDWCM

prof. dr. sc. Abram Maja, dr. med. [153] · izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288]		
07.04.2025		

L17 Tropical diseases, Infections caused by parasytes:
• [P10 - INFEKTOLOGIJA] (08:00 - 09:30) [288]
  ○ IDWCM
		S15 Infections of te Urinary system and sexually-transmitted diseases:
		• [P10 - INFEKTOLOGIJA] (10:00 - 12:15) [153]
		  ○ IDWCM
		S16 Patient with urinary tract infection or STD – case report:
		• [P10 - INFEKTOLOGIJA] (12:30 - 14:00) [289]
		  ○ IDWCM

prof. dr. sc. Abram Maja, dr. med. [153] · izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		
08.04.2025		

L18 Infections caused by anaerobic bacteria:
• [P10 - INFEKTOLOGIJA] (08:00 - 09:30) [288]
  ○ IDWCM
		S17 Bloodstream infections, infection of the lymphoreticular system:
		• [P10 - INFEKTOLOGIJA] (10:00 - 12:15) [153]
		  ○ IDWCM
		S18 Patient with bloodstream infection or lymphoreticular system infection – case report:
		• [P10 - INFEKTOLOGIJA] (12:30 - 14:00) [288]
		  ○ IDWCM

prof. dr. sc. Abram Maja, dr. med. [153] · izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288]		
09.04.2025		

L19 HIV:
• [P10 - INFEKTOLOGIJA] (08:00 - 09:30) [289]
  ○ IDWCM
		S19 Healthcare-associated infections:
		• [P10 - INFEKTOLOGIJA] (10:00 - 12:15) [153]
		  ○ IDWCM
		
		S20 Patient with healthcare-associated infection – case report:
		• [P10 - INFEKTOLOGIJA] (12:30 - 14:00) [288]
		  ○ IDWCM

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10.04.2025		

L20 Infections in immunocompromised host:
• [P11 - KBC RI] (08:00 - 09:30) [288]
  ○ IDWCM
	PW10 Physical exam of a patient with suspected infection of urinary system:
	• [Klinika za infektivne bolesti] (10:00 - 13:00) [288] [291] [289]
	  ○ PWa6
	  ○ PWa5
	  ○ PWa4
	• [Klinika za infektivne bolesti] (13:00 - 16:00) [288] [291] [289]
	  ○ PWa3
	  ○ PWa2
	  ○ PWa1	

izv. prof. dr. sc. Cekinović Grbeša Đurđica, dr. med. [288] · Livajić Marija, dr. med. [291] · izv. prof. dr. sc. Slavuljica Irena, dr. med. [289]		

List of lectures, seminars and practicals:

[PREDAVANJA] (TOPIC)	Number of hours	Location
L1 Introduction to infectious diseases	3	[P10 - INFEKTOLOGIJA]
L2 Diagnostics of infectious diseases	3	[P10 - INFEKTOLOGIJA]
L3 Anti-infective therapy	3	[P10 - INFEKTOLOGIJA]
L4 Infections of the Gastrointestinal system	3	[P10 - INFEKTOLOGIJA]
L5 Virus hepatitis	3	[P13 - ORL (otorinolaringologija)]
L6 Infections of the Respiratory system	3	[P13 - ORL (otorinolaringologija)]
L7 Infections caused by Streptococci and Angina	3	[ONLINE]
L8 Infections caused by Staphylococci, Toxic shock syndrome	3	[P10 - INFEKTOLOGIJA]
L9 Infections of the Central nervous system	3	[P10 - INFEKTOLOGIJA]
L10 Fever with rash	3	[P10 - INFEKTOLOGIJA]
L11 Immunoprophylaxis, vaccination	2	[P10 - INFEKTOLOGIJA]
L12 Herpes-virus infections	2	[P11 - KBC RI]
L13 Sepsis, Fever of unknown origin	2	[P11 - KBC RI]
L14 Urinary tract infections	2	[P11 - KBC RI]
L15 Zoonoses	2	[P10 - INFEKTOLOGIJA]
L16 Infections caused by Spirochaete	2	[P13 - ORL (otorinolaringologija)]
L17 Tropical diseases, Infections caused by parasytes	2	[P10 - INFEKTOLOGIJA]

L18 Infections caused by anaerobic bacteria	2	[P10 - INFEKTOLOGIJA]
L19 HIV	2	[P10 - INFEKTOLOGIJA]
L20 Infections in immunocompromised host	2	[P11 - KBC RI]

[VJEŽBE] (TOPIC)	Number of hours	Location
PW1 Adult patient with an infectious disease (history of the disease, epidemiology, clinical status)	4	[Klinika za infektivne bolesti]
PW2 Child with an infectious disease (history of the disease, epidemiology, clinical status)	4	[Klinika za infektivne bolesti]
PW3 Collection of tissue samples for microbiology analysis, interpretation of results. Clinical microbiology laboratory work.	4	[Klinika za infektivne bolesti]
PW4 Physical exam of a patient with suspected infection of central nervous system – importance of meningeal signs	4	[Klinika za infektivne bolesti]
PW5 Physical exam of a patient with suspected infection of respiratory system	4	[Klinika za infektivne bolesti]
PW6 Physical exam of a patient with suspected infection of cardiovascular system	4	[Klinika za infektivne bolesti]
PW7 Physical exam of a patient with suspected infection of gastrointestinal system	4	[Klinika za infektivne bolesti]
PW8 Physical exam of a patient with suspected infection of liver and bile duct	4	[Klinika za infektivne bolesti]
PW9 Physical exam of a patient with suspected lymphoreticular system infection	4	[Klinika za infektivne bolesti]
PW10 Physical exam of a patient with suspected infection of urinary system	4	[Klinika za infektivne bolesti]

[SEMINARI] (TOPIC)	Number of hours	Location
S1 Principles of infectious diseases pathogenesis and diagnosis	3	[P10 - INFEKTOLOGIJA]
S2 Diagnosis of infectious diseases - Practical examples	2	[P10 - INFEKTOLOGIJA]
S3 Infections of the gastrointestinal system and oral cavity	3	[P13 - ORL (otorinolaringologija)]
S4 Patient with gastrointestinal infection – case report	2	[P13 - ORL (otorinolaringologija)]
S5 Infections of the liver and hepatobiliary system	3	[ONLINE]
S6 Patient with viral hepatitis or infection of the hepatobiliary system – case report	2	[ONLINE]
S7 Infections of the Respiratory system	3	[P10 - INFEKTOLOGIJA]
S8 Patient with respiratory tract infection – case report	2	[P10 - INFEKTOLOGIJA]
S9 Infections of the skin and skeletal system	3	[P11 - KBC RI]
S10 Patient with skin or skeletal system infection – case report	2	[P11 - KBC RI]
S11 Infections of the Central nervous system	3	[P10 - INFEKTOLOGIJA]
S12 Patient with Central nervous system infection – case report	2	[P10 - INFEKTOLOGIJA]
S13 Congenital and neonatal infections	3	[P10 - INFEKTOLOGIJA]
S14 Patient with congenital or neonatal infection – case report	2	[P10 - INFEKTOLOGIJA]
S15 Infections of te Urinary system and sexually-transmitted diseases	3	[P10 - INFEKTOLOGIJA]

S16 Patient with urinary tract infection or STD – case report	2	[P10 - INFEKTOLOGIJA]
S17 Bloodstream infections, infection of the lymphoreticular system	3	[P10 - INFEKTOLOGIJA]
S18 Patient with bloodstream infection or lymphoreticular system infection – case report	2	[P10 - INFEKTOLOGIJA]
S19 Healthcare-associated infections	3	[P10 - INFEKTOLOGIJA]
S20 Patient with healthcare-associated infection – case report	2	[P10 - INFEKTOLOGIJA]

EXAM DATES (final exam):

1.	23.04.2025.
2.	17.06.2025.
3.	07.07.2025.
4.	09.09.2025.
5.	23.09.2025.