



Course: Infectious diseases and Clinical microbiology

Course Coordinator: Assist. prof. Đurđica Cekinović Grbeša, MD, PhD

Department: Department for infectious diseases

Study program: Integrated Undergraduate and Graduate University Study of Medicine in English

Study year: 4.

Academic year: 2021/22

SYLLABUS

Course description (a brief description of the course, general instructions, where and in what form the lessons are organized, necessary equipment, instructions for attendance and preparation for classes, student obligations, etc.):

“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, hepatobiliary 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. Protozoal 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 organized as lectures, seminars and practical exercises which mutually interfere and append and all forms of lessons 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 lessons are obligatory, as regulated by Statute of the Faculty of Medicine in Rijeka.

Assigned reading:

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

Optional/additional 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: 2018 Report of the Committee on Infectious Diseases 31st Ed. Itasca, IL, American Academy of Pediatrics, 2018.

COURSE TEACHING PLAN:

The list of lectures (with topics and descriptions):

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, immunoprophylaxis)

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 interpret 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, pharmacokinetics and pharmacodynamics of antimicrobial drugs, sideeffects 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 hepatitis“. 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 of HBV infection. Learn how to prevent the spread of viruses that 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 of 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 eflouescences, learn about of the eflouescence 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 complications 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 sepsis. 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 of syphilis, leptospirosis and Lyme disease.

L17 Tropical diseases, Infections caused by parasites

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 parasite 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 systems. 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 AIDS-indicative 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 immunosuppression (either genetic or therapy-induced). Learn about infections in splenectomized patients and modes of their prevention.

The list of seminars with descriptions:

Seminars are integrated together with clinical microbiology classes in clinical units. First part of the seminars run by microbiologist with whom students discuss pathogenetic mechanisms of specific infectious disease, based on virulence factors of pathogens and elements of the host immune response that are activated in response to pathogen. Infectious diseases specialist with whom students discuss clinical course, treatment and outcome of particular infections runs second part of the seminar. Second part of the seminar is held either as bedside or as case-report study.

S1 Principles of infectious diseases pathogenesis and diagnosis

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

S4 Patient with gastrointestinal infection – case report

Learn epidemiology and pathogenesis of gastrointestinal infections; differentiate between infectious and non-infectious causes of diarrhea. Learn the 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. Learn 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

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

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

S7 Infections of the Respiratory system

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 about the complications of the flu.

S9 Infections of the skin and skeletal system

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 skeletal system infections.

S11 Infections of the Central nervous system

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. Differentiate between meningismus and meningitis. Learn how to interpret results of cerebrospinal fluid cytologic and biochemical analysis.

S13 Congenital and neonatal infections

S14 Patient with congenital or neonatal infection – case report

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

S15 Infections of the Urinary system and sexually-transmitted diseases

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

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

Learn etiology

S19 Healthcare-associated infections

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.)

Practical work

Practical work is performed either by the hospital beds or in the Clinic ambulance room under the supervision of an infectious diseases specialist or infectious diseases junior doctor. Within one practical work session, students are obligated to take a patient's history of the disease and perform physical exam in order to establish clinical (working) diagnosis. This is followed by discussion of possible differential diagnoses, necessary procedures that will confirm or discard the working diagnosis as final (concluding) diagnosis. Finally, means of treatment (outpatient clinic or hospital) and reporting of infectious diseases syndromes to epidemiology department are discussed.

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 from 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 perform 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 lumbar puncture. Learn how to properly interpret the results of cell-, biochemical- and 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 clinical syndromes that urge obtaining blood culture samples. Learn how to adequately obtain and process blood cultures in order 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 criteria) 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 syndromes enteritis, colitis, gastroenteritis, enterocolitis and gastroenterocolitis according to presented symptoms of the syndrome. Learn how to interpret the results of stools macro- and microscopic analysis in accordance to etiology of diarrhea (bacteria / virus / parasites / fungi). Learn which non-infective syndromes 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 lymph 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 properly obtain urine sample for microbiological analysis. Learn how to obtain prostate excrete and urethral 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.

Students' 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 $\leq 30\%$ 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.

Assessment (exams, description of written / oral / practical exam, the scoring 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 $\geq 30\%$ of the final grade can take final exam.

Final exam:

Max 40%	Grade
35-40%	Excellent (5)
30-34%	Very good (4)
25-29%	Good (3)
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

90-100%	5	A	Excellent
75-89,9%	4	B	Very good
60-74,9%	3	C	Good
50-59,9%	2	D	Sufficient
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's themes are principles of infectious diseases (Infectious diseases' general), diagnostics and therapy of infectious diseases. First exam essay will be held on May 9th 2022 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 and Infections of the gastrointestinal system. Second exam essay will be held on May 23rd 2022 at 08:00 am in the lecture room of the Clinical hospital center Rijeka
9. Repeat examination for exam essays will be held at one time point between two time dates of final exams 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. 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 17.6.2021.; 02.07.2021., 05.09.2021. and 19.09.2021. The final exam results will be published on the web pages and on the notice board.

Other important information regarding to the course:

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 infectious 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 SCHEDULE (for academic year 2021/2022)

Date	Lectures (time and place)	Seminars (time and place)	Practical exercises	Instructor
25.04.2022.	L1 (08:00-10:15)			assist. prof. Đurđica Cekinović Grbeša
26.04.2022.	L2 (08:00-10:15)			Prof. Maja Abram
26.04.2022.		S1 (10:30-12:45)		Prof. Maja Abram
26.04.2022.		S2 (13:00-14:30)		assist. prof. Đurđica Cekinović Grbeša
27.04.2022.			PW1 (A1,2,3) (10:30-13:30)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
27.04.2022.			PW1 (A4,5,6) (13:30-16:30)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
29.04.2022.	L3 (08:00-10:15)			assist. prof. Đurđica Cekinović Grbeša
02.05.2022.	L4 (08:00 -10:15)			assist. prof. Đurđica Cekinović Grbeša
03.05.2022.	L5 (08:00-10:15)			prof. Ivica Pavić
03.05.2022.		S3 (10:30-12:45)		Prof. Maja Abram
03.05.2022.		S4 (13:00-14:30)		prof. Ivica Pavić
04.05.2022.			PW2 (A1,2,3) (10:30-13:30)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
04.05.2022.			PW2 (A4,5,6) (13:30-16:30)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
06.05.2022.	L6 (08:00-10:15)			assist. prof. Đurđica Cekinović Grbeša
09.05.2022.	EXAM ESSAY 1 (08:00-09:30)			
10.05.2022.	L7 (08:00 -10:15)			assist. prof. Irena Slavuljica
10.05.2022.		S5 (10:30-12:45)		Prof. Maja Abram
10.05.2022.		S6(13:00 - 14:30)		assist. prof. Đurđica Cekinović Grbeša
11.05.2022.			PW3 (A1,2,3) (10:30 -13:30)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
11.05.2022.			PW3 (A4,5,6) (13:30-16:30)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
13.05.2022.	L8 (08:00-10:15)			assist. prof. Irena Slavuljica
16.05.2022.	L9 (08:00-10:15)			assist. prof. Đurđica Cekinović Grbeša
16.05.2022.		S7 (10:30-12:45)		Prof. Maja Abram
16.05.2022.		S8(13:00 - 14:30)		assist. prof. Đurđica Cekinović Grbeša
17.05.2022.	L10 (08:00-10:15)			assist. prof. Đurđica Cekinović Grbeša
17.05.2022.		S9 (10:30-12:45)		Prof. Maja Abram

17.05.2022.		S10 (13:00-14:30)		assist. prof. Irena Slavuljica
18.05.2022.			PW4 (A1,2,3) (10:30-13:30)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
18.05.2022.			PW4 (A4,5,6) (13:30-16:30)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
19.05.2022.	L11 (08:00-09:30)			assist. prof. Irena Slavuljica
19.05.2022.			PW5 (A1,2,3) (10:00-13:00)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
19.05.2022.			PW5 (A4,5,6) (13:00-16:00)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
20.05.2022.	L12 (08:00-09:30)			assist. prof. Irena Slavuljica
20.05.2022.		S11 (10:00-12:15)		Prof. Maja Abram
20.05.2022.		S12 (12:30-14:00)		assist. prof. Đurđica Cekinović Grbeša
23.05.2022.	EXAM ESSAY 2 (08:00-09:30)			
24.05.2022.		S13 (10:00-12:15)		Prof. Maja Abram
		S14 (12:30-14:00)		assist. prof. Đurđica Cekinović Grbeša
25.05.2022.	L13 (08:00-09:30)			prof. Ivica Pavić
25.05.2022.		S15 (10:00-12:15)		Prof. Maja Abram
25.05.2022.		S16 (12:30-14:00)		prof. Ivica Pavić
26.05.2022.	L14 (08:00-09:30)			prof. Ivica Pavić
26.05.2022.			PW6 (A1,2,3) (10:00-13:00)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
26.05.2022.			PW6 (A4,5,6) (13:00-16:00)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
27.05.2022.	L15 (08:00-09:30)			assist. prof. Đurđica Cekinović Grbeša
27.05.2022.			PW7 (A1,2,3) (10:00-13:00)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
27.05.2022.			PW7 (A4,5,6) (13:00-16:00)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
31.05.2022.	L16 (08:00-09:30)			assist. prof. Đurđica Cekinović Grbeša
31.05.2022.		S17 (10:00-12:15)		Prof. Maja Abram
31.05.2022.		S18 (12:30-14:00)		assist. prof. Đurđica Cekinović Grbeša
01.06.2022.	L17 (08:00-09:30)			assist. prof. Đurđica Cekinović Grbeša
01.06.2022.		S19 (10:00-12:15)		Prof. Maja Abram
01.06.2022.		S20 (12:30-14:00)		assist. prof. Đurđica Cekinović Grbeša
02.06.2022.	L18 (08:00-09:30)			assist. prof. Irena Slavuljica

02.06.2022.			PW8 (A1,2,3) (10:00-13:00)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
02.06.2022.			PW8 (A4,5,6) (13:00-16:00)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
03.06.2022.	L19(08:00 - 09:30)			prof. Ivica Pavić
03.06.2022.			PW9 (A1,2,3) (10:00-13:00)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
03.06.2022.			PW9 (A4,5,6) (13:00-16:00)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša
06.06.2022.	L20 (08:00 - 09:30)			prof. Ivica Pavić
06.06.2022.			PW10 (A1,2,3) (10:00-13:00)	Mari Rončević Filipović, MD Marija Livajić, MD assist. prof. Irena Slavuljica
06.00.2022.			PW10 (A4,5,6) (13:00-16:00)	Marija Livajić, MD assist. prof. Irena Slavuljica assist. prof. Đurđica Cekinović Grbeša

List of lectures and seminars:

	LECTURES (Topics)	Teaching hours	Location/Lecture room
L1	Introduction to infectious diseases	3	
L2	Diagnostics of infectious diseases	3	
L3	Anti-infective therapy	3	
L4	Infections of the gastrointestinal system	3	
L5	Viral hepatitis	3	
L6	Infections of the respiratory system	3	
L7	Infections caused by Streptococci	3	
L8	Infections caused by Staphylococci	3	
L9	Infections of the central nervous system	3	
L10	Fever with rash	3	
L11	Immunoprophylaxis	2	
L12	Herpesvirus infections	2	
L13	Sepsis, Fever of unknown origin	2	
L14	Urinary tract infections	2	
L15	Zoonoses	2	
L16	Infections caused by Spirochete (Syphilis, leptospirosis, Lyme disease)	2	
L17	Tropical diseases, Infections caused by parasites	2	
L18	Infections caused by Anaerobic bacteria	2	
L19	HIV infection and AIDS	2	
L20	Infections in immunocompromised patients	2	

	SEMINARS (Topics)	Teaching hours	Location/Lecture room
S1	Pathogenesis of infection, diagnostics of infectious diseases	3	
S2	Diagnostics of infectious diseases - practical examples	2	
S3	Gastrointestinal tract infections, infections in the oral cavity	3	
S4	Patient with gastrointestinal tract infection	2	
S5	Infections of the liver and biliary system	3	
S6	Patient with acute / chronic hepatitis	2	
S7	Respiratory tract infections	3	
S8	Patient with respiratory tract infection	2	
S9	Skin, soft tissue, bone and joint infections	3	
S10	Patient with skin, soft tissue, bone and joint infection	2	
S11	Infections of the central nervous system, infections caused by prions	3	
S12	Patient with central nervous system infection	2	
S13	Congenital and neonatal infections	3	
S14	Patient with congenitally acquired infection	2	
S15	Urinary tract infections (UTI), sexually transmitted diseases (STD)	3	
S16	Patient with UTI / patient with STD	2	
S17	Blood infections, infections of the cardiovascular system	3	
S18	Patient with sepsis / Patient with infective endocarditis	2	
S19	Healthcare-associated infections (HAI)	3	
S20	Patient with HAI	2	

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	PRACTICAL EXERCISES (Topics)	Teaching hours	Location
E1	management of an adult patient with infection (anamnesis, physical exam)	4	
E2	management of a paediatric patient with infection (specificity of anamnesis and physical exam in a child)	4	
E3	microbiological testing in patients with infection	4	
E4	neurological exam in a patient with infection (meningeal signs), cerebrospinal fluid analysis	4	
E5	management of a patient with respiratory tract infection (auscultation in patient with pneumonia, laboratory and radiological differences in patients with RTI syndromes)	4	
E6	management of a patient with bacteremia or sepsis (hemocultures; sampling and interpretation of results; evaluation of SIRS parameters, volume resuscitation in patient with sepsis)	4	
E7	management of a patient with gastrointestinal tract infection (differentiation of symptoms regarding clinical syndromes, stool analysis methods in order of etiology determination)	4	
E8	management of a patient with liver and biliary tract infection (practical approach to a patient with febrile icterus, correct interpretation of serology analysis results in patients with viral hepatitis)	4	
E9	management of a patient with suspected infection of reticulo-endothelial system (lymph node puncture and interpretation of cytology analysis results, differential diagnosis of acute lymphadenitis)	4	
E10	management of a patient with urinary tract infection (urinoculture; sampling and interpretation of results, collection of a prostatic secretion; interpretation of cytology and microbiology analysis results)	4	

	FINAL EXAM DATES
1.	16.6.2022.
2.	2.7.2022.
3.	5.9.2022.
4.	26.9.2022.