

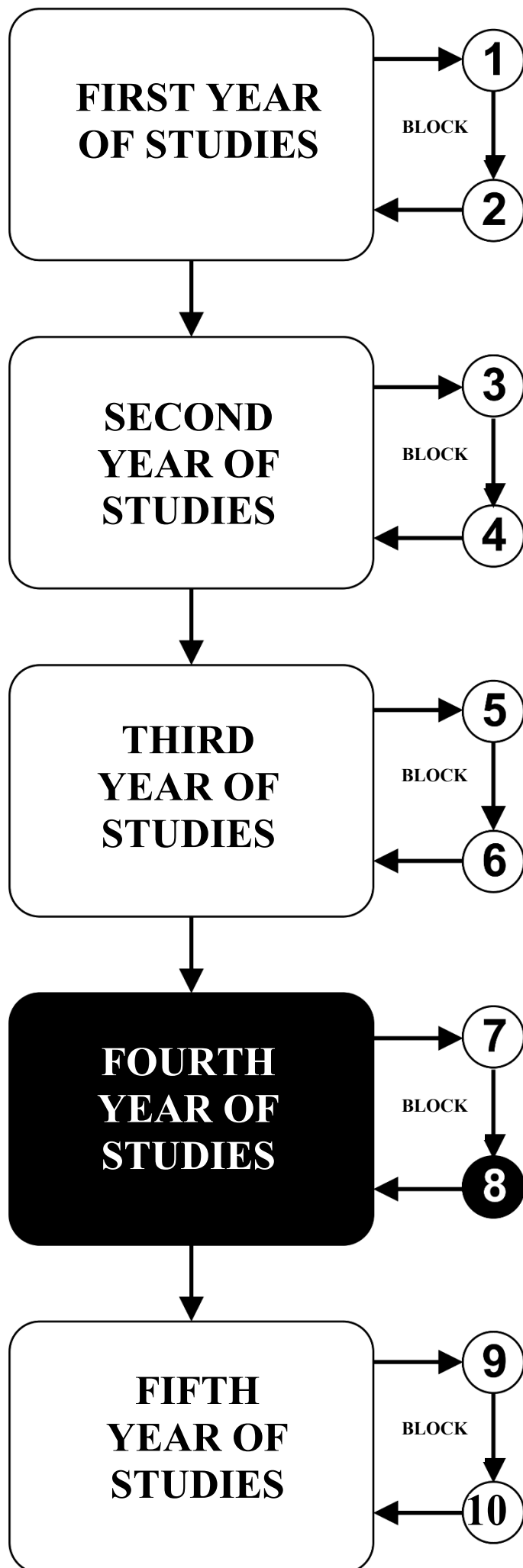


CLINICAL MEDICINE 2

FOURTH YEAR OF STUDIES

School year 2025/2026.

THERAPY OF INFECTIOUS DISEASES



Course:

THERAPY OF INFECTIOUS DISEASES

The course is evaluated with 3 ECTS. There are 4 hours of active classes per week (2 hours of lectures and 2 hours of work in a small group).

TEACHERS AND ASSOCIATES:

ord.	First and last name	Email address	Teacher's title
1.	Biljana Popovska-Jovičić	biljanapop@yahoo.com	Associate Professor, MD, PhD
2.	Sara Petrović	sara.nikolic.kv@gmail.com	Teaching Assistant, MD
3.	Sofija Sekulić Marković	sofija.sekulic91@gmail.com	Teaching Associate, MD
4.	Nemanja Đorđević	nemanja.djordjevic@fmn.kg.ac.rs	Teaching Assistant, MD
5.	Ivana Lešnjak	ivanalesnjak92@gmail.com	Facilitator, MD

COURSE UNIT CONTENTS:

Module ord.	Module title	Number of weekly classes	Number of Lecture classes	Number of Work in a small group classes	Teacher-head of the module
1	General Infectious Diseases; Streptococcal and staphylococcal infections; Rash syndromes in infectious diseases; Respiratory system infections and enteroviral infections. Viral infections of the central nervous system; Bacterial infections of the central nervous system; Noninvasive digestive system infections, Invasive digestive system infections.	8	2	2	Prof. Biljana Popovska Jovičić, MD, PhD
2	Acute and chronic viral hepatitis; Anaerobic infections and zoonoses; Herpes viral infections; HIV infection; Sepsis, septic shock, and viral hemorrhagic fevers; Parasitic and rickettsial diseases; Selected topics in infectious diseases	7	2	2	Prof. Biljana Popovska Jovičić, MD, PhD
					Σ 30+30=60

EXAMINATION METHODS:

The student masters the course by modules. The grade is equivalent to the number of points earned (see tables). Points are earned in three ways:

ACTIVITY DURING LECTURES: In this way, the student can gain up to 15 points by answering 2 exam questions from that week of classes and receiving 0-1 points in accordance with the demonstrated knowledge.

COLLOQUIUMS (MODULE TESTS): In this way, a student can earn up to 25 points according to the attached grading scheme by modules.

FINAL WRITTEN EXAM: In this way, the student can obtain a maximum of 60 points, answering 30 exam questions of the final written exam. Each correct answer is scored with 2 points.

MODULE		MAXIMUM POINTS			
		Activity during lectures	Module test	Final written exam	Σ
1	General Infectious Diseases; Streptococcal and staphylococcal infections; Rash syndromes in infectious diseases; Respiratory system infections and enteroviral infections. Viral infections of the central nervous system; Bacterial infections of the central nervous system; Noninvasive digestive system infections, Invasive digestive system infections	8	15	60	100
2	Acute and chronic viral hepatitis; Anaerobic infections and zoonoses; Herpes viral infections; HIV infection; Sepsis, septic shock, and viral hemorrhagic fevers; Parasitic and rickettsial diseases; Selected topics in infectious diseases	7	10		

CONSULTATIVE TEACHING: Consultations can be scheduled with the head of the department, Prof Biljana Popovska Jovičić, MD, PhD (biljanapop@yahoo.com)

The final grade is formed as follows:

In order to pass the course, the student must obtain a minimum of 55 points, pass module tests and pass the final written exam.

To pass the module the student must:

1. obtains more than 50% points in that module
2. acquires more than 50% of the points provided for the activity during lectures
3. pass the module tests, i.e. have more than 50% correct answers
4. obtains more than 50% points in the final written exam

Grading system

No. of points	Grade
0 - 50	5
51 - 60	6
61 - 70	7
71 - 80	8
81 - 90	9
91 - 100	10

TESTS BY MODULES

MODULE 1.

FINAL TEST

0-15 POINTS

GRADING SYSTEM OF THE FINAL TEST

**The test has 30 questions.
Each question is worth 0.5
point.**

MODULE 2.

FINAL TEST

0-10 POINTS

GRADING SYSTEM OF THE FINAL TEST

**The test has 20 questions.
Each question is worth 0.5
point.**

LITERATURE:

Textbook name	Authors	Publisher	Availability in the faculty library
Harrison's Principles of Internal Medicine 21st Edition	Joseph Loscalzo, Anthony Fauci, Dennis Kasper, Stephen Hauser , Dan Longo and J. Larry Jameson	MC Graw Hill	Available
Netter's infectious diseases 2en edition	Elaine c. Jong, Dennis l. Stevens	ELSEVIER	Available

All lectures are available on the website of the Faculty of Medical Sciences: www.medf.kg.ac.rs

PROGRAM

TEACHING UNIT 1 (FIRST WEEK):

GENERAL INFECTIOUS DISEASES	
2 school hours of lectures	2 school hours of work in a small group
• Basic etiological, pathogenetic, and clinical characteristics of infectious diseases • Basic principles of diagnosis and treatment of infectious diseases • Most important clinical syndromes in Infectology What a student should know: • To acquire basic knowledge about the etiology of infectious diseases • To acquire basic knowledge about the pathogenesis of infectious diseases • To learn the basic forms of clinical manifestations of infectious diseases • To review the basic principles of diagnosis and therapy of infectious diseases • To learn the basic principles of immunoprophylaxis of infectious diseases	• Familiarizing students with history taking in infectious patients • Acquaintance of students with the constituent parts of anamnesis • Acquaintance of students with basic symptoms and signs of infectious diseases • Taking anamnesis from patients by students What a student should know: • To independently take a complete medical history from the patient • To know how to interpret the symptoms and signs of the disease present in the patient

TEACHING UNIT 2 (SECOND WEEK):

STREPTOCOCCAL AND STAPHYLOCOCCAL INFECTIONS	
2 school hours of lectures	2 school hours of work in a small group
• Become familiar with the characteristics of streptococcal infections and their antigenic structure • To learn the clinical forms of streptococcal infections • Familiarize yourself with the way of diagnosing streptococcal infections • Learn the principles of antibiotic therapy of streptococcal infections • To learn the most significant clinical forms of staphylococcal infections • Familiarize yourself with the use of antistaphylococcal antibiotics What a student should know: • To acquire knowledge about the etiology, pathogenesis, clinical picture, diagnosis and therapy of streptococcal and staphylococcal infections	• Clinical examples and work with a patient suffering from the mentioned pathology • Pharmacotherapeutic approach

TEACHING UNIT 3 (THIRD WEEK):

RASH SYNDROME IN INFECTIOLOGY	
2 school hours of lectures	2 school hours of work in a small group
• Familiarize yourself with the etiology and pathogenesis of rash syndrome in infectious diseases • Familiarize yourself with the most significant clinical characteristics of viral rash diseases What a student should know: • To acquire knowledge about etiology, epidemiology, pathogenesis, clinical picture, diagnosis, therapy, complications and prevention of the most common rash viral diseases	• Acquaintance of students with the basic morphological elements of rash • Acquaintance students with the importance of morphology, the method of outbreak and distribution of rash • Clinical examples and work with a patient suffering from the mentioned pathology • Pharmacotherapeutic approach

TEACHING UNIT 4 (FOURTH WEEK):

RESPIRATORY SYSTEM INFECTIONS AND ENTEROVIRUSES

2 school hours of lectures	2 school hours of work in a small group
• Familiarize yourself with the characteristics of the most important respiratory infections (influenza, parainfluenza, adenovirus, mumps) • Familiarize yourself with the characteristics of the most significant enterovirus infections What a student should know: • To acquire knowledge about the etiology, pathogenesis, clinical picture, diagnosis and therapy of the most common respiratory infections • To acquire knowledge about etiology, pathogenesis, clinical picture, diagnosis and therapy of enterovirus diseases	• Acquaintance of students with the most important symptoms and signs of disease in patients with diseases of the respiratory organs • Clinical examples and work with a patient suffering from the mentioned pathology • Pharmacotherapeutic approach

TEACHING UNIT 5 (FIFTH WEEK):

VIRAL INFECTIONS OF THE CNS

2 school hours of lectures	2 school hours of work in a small group
• Getting to know the etiology, epidemiology, pathophysiology, clinical manifestations, diagnosis, therapy and complications of viral meningitis and meningoencephalitis • Getting to know the specifics of herpetic encephalitis What a student should know: • To acquire knowledge about the etiology, epidemiology, pathogenesis, clinical picture, diagnosis, therapy, complications and prevention of the most common viral neuroinfections	• Introducing students to the performance of meningeal signs • Lumbar puncture observation • Cytological examination of the cerebrospinal fluid • Pharmacotherapeutic approach What a student should know: • Basics of diagnosing viral neuroinfection • Cytobiochemical interpretation during examination of cerebrospinal fluid • Significance of CT and NMR of the endocranium in differential diagnoses of acute neuroinfections

TEACHING UNIT 6 (SIXTH WEEK):

BACTERIAL INFECTIONS OF THE CNS

2 school hours of lectures	2 school hours of work in a small group
• Getting to know the pathophysiological and clinical characteristics of meningeal syndrome • Getting to know the specifics of bacterial infections of the CNS, caused by certain bacteria (Pneumococcus, Haemophilus influenzae, Meningococcus, Tuberculosis bacillus) • Familiarity with focal infections of the CNS What a student should know: • What are the specific symptoms related to CNS infections • To acquire knowledge about etiology, epidemiology, pathogenesis, clinical picture, diagnosis, therapy, complications and prevention of the most common bacterial neuroinfections	• Clinical examples and work with a patient suffering from the mentioned pathology • Pharmacotherapeutic approach What a student should know: • Basics of diagnosing bacterial neuroinfection • Cytobiochemical interpretation during examination of cerebrospinal fluid

TEACHING UNIT 7 (SEVENTH WEEK):

NON-INVASIVE BACTERIAL AND VIRAL DIGESTIVE SYSTEM INFECTIONS

2 school hours of lectures	2 school hours of work in a small group
Lecture: Infections of the digestive system (etiology and pathogenesis of intestinal infections; basic therapeutic principles of intestinal infections; non-invasive bacterial and viral infections of the digestive system). Invasive bacterial infections of the digestive system; Postantibiotic colitis; Traveler's diarrhea. Seminar: Case report of a patient with an intestinal infection.	What a student should know: To acquire knowledge about the etiology, clinical picture, diagnosis, therapy and prevention of the most common non-invasive intestinal infections. • Pharmacotherapeutic approach

TEACHING UNIT 8 (EIGHTH WEEK):

INVASIVE BACTERIAL DIGESTIVE SYSTEM INFECTIONS

2 school hours of lectures	2 school hours of work in a small group
Lecture: Infections of the digestive system (etiology and pathogenesis of intestinal infections; basic therapeutic principles of intestinal infections; Invasive bacterial infections of the digestive system; Postantibiotic colitis; Traveler's diarrhea. Seminar: Case report of a patient with an intestinal infection.	What a student should know: To acquire knowledge about the etiology, clinical picture, diagnosis, therapy and prevention of the most common invasive intestinal infections. • Pharmacotherapeutic approach

TEACHING UNIT 9 (NINTH WEEK):

ACUTE AND CHRONIC VIRAL HEPATITIS

2 school hours of lectures	2 school hours of work in a small group
Lecture: Acute and chronic viral hepatitis (hepatitis A, hepatitis B, hepatitis C viral infection; chronic hepatitis - therapeutic approach). Seminar: Case report of a patient with acute hepatitis.	What a student should know: To acquire knowledge about the etiology, epidemiology, clinical picture, diagnosis, therapy and prevention of the most common viral infections of the liver. • Pharmacotherapeutic approach

TEACHING UNIT 10 (TENTH WEEK):

ANAEROBIC INFECTIONS AND ZOONOSES

2 school hours of lectures	2 school hours of work in a small group
Lecture: Anaerobic infections and zoonoses (tetanus, botulism, leptospirosis, anthrax, borreliosis, rabies, trichinosis, therapeutic approach). Seminar: Case report of a patient with leptospirosis.	What a student should know: To acquire knowledge about etiology, epidemiology, clinical picture, diagnosis, therapy, complications and prevention of the most common anaerobic infections and zoonoses. • Pharmacotherapeutic approach

TEACHING UNIT 11 (ELEVENTH WEEK):

HERPES VIRAL INFECTIONS

2 school hours of lectures	2 school hours of work in a small group
Lecture: Herpes virus infections (herpes simplex virus, infectious mononucleosis, CMV infections, herpes zoster, therapeutic approach). Seminar: Case report of a patient with infectious mononucleosis.	What a student should know: To learn about the etiology, epidemiology, clinical picture, diagnosis, therapy and prevention of herpes virus infections. • Pharmacotherapeutic approach

TEACHING UNIT 12 (TWELFTH WEEK):

HIV INFECTION

2 school hours of lectures	2 school hours of work in a small group
Lecture: HIV infection. Significance, etiology, epidemiology and pathogenesis. Natural course of HIV infection, opportunistic infections and tumors in AIDS. Diagnosis and treatment of HIV infection. Definition of fever of unknown origin and its division Seminar: Case report of patient with AIDS.	What a student should know: To acquire knowledge about etiology, epidemiology, clinical picture, diagnosis, therapy, complications and prevention of HIV infection. • Pharmacotherapeutic approach

TEACHING UNIT 13 (THIRTEENTH WEEK):

SEPSIS, SEPTIC SHOCK, AND VIRAL HEMORRHAGIC FEVERS

2 school hours of lectures	2 school hours of work in a small group
Lecture: Sepsis. Etiology and pathogenesis of sepsis. Clinical picture and therapy of sepsis. Septic shock. Definition. Criteria for septic shock. Treatment. Viral hemorrhagic fevers. Hemorrhagic fever with renal syndrome. Epidemiological characteristics. Clinical manifestation and treatment. Seminar: Case report of a patient with sepsis.	What a student should know: To acquire knowledge about the etiology, epidemiology, pathogenesis, clinical picture, diagnosis, therapy, complications of sepsis and the most common hemorrhagic fevers in our region • Pharmacotherapeutic approach

TEACHING UNIT 14 (FOURTEENTH WEEK):

PARASITIC AND RICKETTSIAL DISEASES

2 school hours of lectures	2 school hours of work in a small group
Lecture: Parasitic diseases. Malaria, amoebiasis, leishmaniasis, toxoplasmosis - epidemiological and pathogenetic characteristics, clinical manifestations, diagnosis and treatment. Rickettsial diseases. Spotted typhus, Brill-Zinsser disease. Seminar: Case report of a patient with malaria.	What a student should know: To acquire knowledge about the etiology, epidemiology, clinical picture, diagnosis and therapy of the most common parasitic and rickettsial diseases. • Pharmacotherapeutic approach

TEACHING UNIT 15 (FIFTEENTH WEEK):

SELECTED TOPICS IN INFECTIOUS DISEASES

2 school hours of lectures	2 school hours of work in a small group
Lecture: Intrauterine infections. Congenital rubella, primary infections of pregnant women caused by CMV, HSV, Toxoplasma gondii, etc. Intrahospital infections - Significance, definition, classification. Measures to prevent and control intrahospital infections. Seminar: Case reports of patients with intrahospital infection.	What a student should know: Definition and types of nosocomial infections. Risk factors for hospital infections. Measures for the suppression of nosocomial infections of the TORCH group of causes of intrauterine infections

LESSON SCHEDULE FOR THE COURSE: TREATMENT OF INFECTIVE DISEASES

Module	Week	Type	Method unit name	Teacher
1	1	L	General Infectious Diseases	Biljana Popovska-Jović
1	1	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	2	L	Streptococcal and staphylococcal infections	Biljana Popovska-Jović
1	2	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	3	L	Rash syndromes in infectious diseases	Biljana Popovska-Jović
1	3	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	4	L	Respiratory system infections and enteroviral infections	Biljana Popovska-Jović
1	4	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković Biljana Popovska-Jović
1	5	L	Viral infections of the central nervous system	Biljana Popovska-Jović
1	5	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	6	L	Bacterial infections of the central nervous system	Biljana Popovska-Jović
1	6	SG		Sara Petrović Nemanja Đorđević

				Sofija Sekulić Marković
1	7	L	Non-invasive bacterial and viral digestive system infections	Biljana Popovska-Jović

LESSON SCHEDULE FOR THE COURSE: TREATMENT OF INFECTIVE DISEASES

Module	Week	Type	Method unit name	Teacher
1	7	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	8	L	Invasive bacterial digestive system infections	Biljana Popovska-Jovičić
1	8	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	9	L	Acute and chronic viral hepatitis	Biljana Popovska-Jovičić
1	9	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković Biljana Popovska-Jovičić
1	10	L	Anaerobic infections and zoonoses	Biljana Popovska-Jovičić
1	10	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	11	L	Herpes viral infections	Biljana Popovska-Jovičić
1	11	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	12	L	HIV infection	Biljana Popovska-Jovičić
1	12	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković

1	13	L	Sepsis, septic shock, and viral hemorrhagic fevers	Biljana Popovska-Jović
1	13	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković Biljana Popovska-Jović

LESSON SCHEDULE FOR THE COURSE: TREATMENT OF INFECTIVE DISEASES

Module	Week	Type	Method unit name	Teacher
1	14	L	Parasitic and rickettsial diseases	Biljana Popovska-Jović
1	14	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković
1	15	L	Selected topics in infectious diseases	Biljana Popovska-Jović
1	15	SG		Sara Petrović Nemanja Đorđević Sofija Sekulić Marković Biljana Popovska-Jović
		MT	MODULE TEST	
		FWE	FINAL WRITTEN EXAM	

List of abbreviations: **L** - Lecture
SG – Work in a small group
MT – Module test
FWE – Final written test