

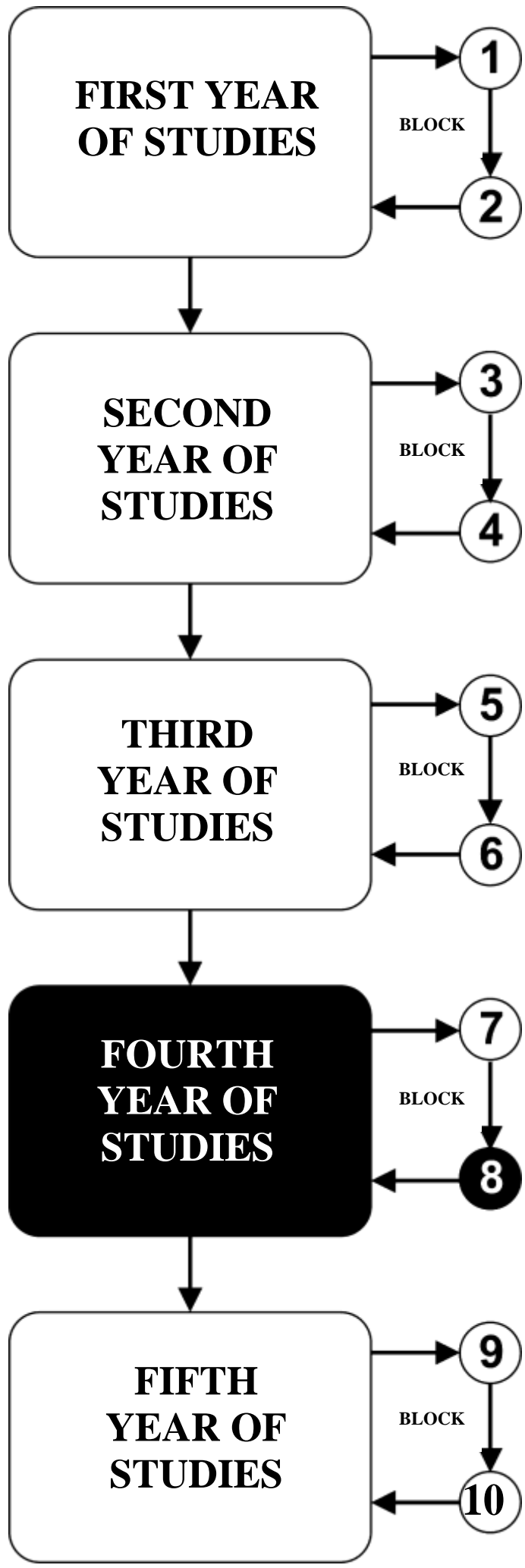


**PHARMACY - INTEGRATED
ACADEMIC STUDIES**

FOURTH YEAR OF STUDIES

School year 2023/2024.

TREATMENT OF INFECTIVE DISEASES



Course:

TREATMENT OF INFECTIVE DISEASES

The course is evaluated with 6 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.			
2.			
3.			
4.			
5.			
6.			

COURSE UNIT CONTENTS:

Module ord.	Module title	Number of weeks classes	Number of Lecture classes	Number of Work in a small group classes	Teacher-head of the module
1	Infectious diseases as a discipline. Basics of clinical careful history, epidemiologic feature, physical examination, laboratory, microbiological, serological analysis and appropriate radiographic procedure. Diagnosis and treatment of streptococcal and staphylococcal infections. Diagnosis and treatment of rish fever. Diagnosis and treatment of respiratory infections and enterovirus. Diagnosis and treatment of bacterial and viral neuroinfections. Diagnosis and treatment of intestinal infections. Diagnosis and treatment of acute and chronic viral hepatitis. Diagnosis and treatment of anaerobic infections and zoonoses. Diagnosis and treatment of herpes viral infections. Diagnosis and treatment of FUO and AIDS. Diagnosis and treatment of sepsis and viral hemorrhagic fevers. Diagnosis and treatment of parasitic and rickettsial diseases. Diagnosis and treatment of intrauterine and intrahospital infections. Clinically important adverse drug reactions and drug-drug interactions in infectious diseases.	15	2	2	
					Σ 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 30 points by answering 2 exam questions from that week of classes and receiving 0-2 points in accordance with the demonstrated knowledge.

MODULE TEST: In this way, a student can earn up to 30 points according to the attached grading scheme by modules.

ORAL EXAMINATION: In this way, a student can earn a total of 40 points. The oral part of the exam implies that the student orally answers four questions (each question is worth 0-10 points). If the student does not get more than 50% of the points in the oral exam, he has not passed the exam.

MODULE		MAXIMUM POINTS			
		Activity during lectures	Module test	Oral examination	Σ
1	Infectious diseases as a discipline. Basics of clinical careful history, epidemiologic feature, physical examination, laboratory, microbiological, serological analysis and appropriate radiographic procedure. Diagnosis and treatment of streptococcal and staphylococcal infections. Diagnosis and treatment of rush fever. Diagnosis and treatment of respiratory infections and enterovirus. Diagnosis and treatment of bacterial and viral neuroinfections. Diagnosis and treatment of intestinal infections. Diagnosis and treatment of acute and chronic viral hepatitis. Diagnosis and treatment of anaerobic infections and zoonoses. Diagnosis and treatment of herpes viral infections. Diagnosis and treatment of FUO and AIDS. Diagnosis and treatment of sepsis and viral hemorrhagic fevers. Diagnosis and treatment of parasitic and rickettsial diseases. Diagnosis and treatment of intrauterine and intrahospital infections. Clinically important adverse drug reactions and drug-drug interactions in infectious diseases.	30	30	40	100

The final grade is formed as follows:

In order to pass the course, the student must obtain a minimum of 55 points, pass module test and pass the final oral 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 test, i.e. have more than 50% correct answers
4. obtains more than 50% points in the oral examination

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

0-30 POINTS

GRADING SYSTEM OF THE FINAL TEST

**The test has 30 questions.
Each question is worth 1
point.**

LITERATURE:

Textbook name	Authors	Publisher	Availability in the faculty library
Microbiology	Prescott L, Harley J, Klein D.	New York: McGraw-Hill, Inc. 2000.	Available
Oxford Handbook of Infectious Diseases and Microbiology 2nd Edition	Cooke F, Török E, Moran E.	Oxford University Press. 2016.	Available
Basic Immunology: Functions and Disorders of the Immune System, 6th Edition	Abbas A, Lichtman A, Pillai S.	Elsevier Science. 2019.	Available
Review of Medical Microbiology and Immunology, 16th Edition, International Edition	Levinson W.	McGraw Hill. 2020.	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):

INFECTIOUS DISEASES AS A DISCIPLINE

2 school hours of lectures	2 school hours of work in a small group
<p>Introductory lecture (basic etiological, pathogenetic and clinical characteristics of infectious diseases. Seminar: The body's resistance to infectious diseases. Principles of immunoprophylaxis of infectious diseases. Febrility, pathogenesis, types of temperature curve.</p>	Introduction. Getting to know the organization of the work of the infectious disease clinic.

TEACHING UNIT 2 (SECOND WEEK):

BASICS OF CLINICAL CAREFUL HISTORY, EPIDEMIOLOGIC FEATURE, PHYSICAL EXAMINATION, LABORATORY, MICROBIOLOGICAL, SEROLOGICAL ANALYSIS AND APPROPRIATE RADIOGRAPHIC PROCEDURE

2 school hours of lectures	2 school hours of work in a small group
<p>Lecture: Basic principles of diagnosis and therapy of infectious diseases, Seminar: The most important clinical syndromes in infectious diseases.</p>	What the student should know: Taking medical history from infectious patients.

TEACHING UNIT 3 (THIRD WEEK):

DIAGNOSIS AND TREATMENT OF STREPTOCOCCAL AND STAPHYLOCOCCAL INFECTIONS

2 school hours of lectures	2 school hours of work in a small group
<p>Lecture: Streptococcal and staphylococcal infections (angina, scarlet fever, erysipelas, necrotizing fasciitis, malignant staphylococcal disease of the face, toxic shock syndrome; pharmacotherapeutic approach) Seminar: Case report of a patient with streptococcal infection.</p>	What the student should know: To acquire knowledge about the etiology, clinical picture, diagnosis and therapy of streptococcal and staphylococcal infections.

TEACHING UNIT 4 (FOURTH WEEK):

DIAGNOSIS AND TREATMENT OF RUSH FEVER

2 school hours of lectures	2 school hours of work in a small group
<p>Lecture: Rash syndrome in infectious diseases (bacterial, viral, rickettsial diseases accompanied by measles; therapeutic approach to a febrile patient with measles). Seminar: Case report of a patient with varicella.</p>	What the student should know: To acquire knowledge about the etiology, clinical picture, diagnosis, therapy and prevention of the most common rash viral diseases.

TEACHING UNIT 5 (FIFTH WEEK):

DIAGNOSIS AND TREATMENT OF RESPIRATORY INFECTIONS AND ENTEROVIROSI

2 school hours of lectures	2 school hours of work in a small group
<p>Lecture: Infections of the respiratory system and enteroviruses (influenza; parainfluenza; adenoviruses; mumps; enterovirus infections).</p> <p>Seminar: Case report of a patient with an acute respiratory infection.</p>	<p>What the student should know: To learn about the etiology, clinical picture, diagnosis and therapy of the most common respiratory infections. To learn about the etiology, clinical picture, diagnosis and therapy of enterovirus diseases.</p>

TEACHING UNIT 6 (SIXTH WEEK):

DIAGNOSIS AND TREATMENT OF BACTERIAL AND VIRAL NEUROINFECTIONS

2 school hours of lectures	2 school hours of work in a small group
<p>Lecture: Bacterial infections of the CNS (bacterial meningitis, focal infections of the CNS; Viral infections of the CNS (viral meningitis and encephalitis; herpetic encephalitis; Pharmacotherapeutic approach.</p> <p>Seminar: Case reports of a patient with a bacterial and viral infection of the CNS.</p>	<p>What a student should know: Specific symptoms related to CNS infections. To acquire knowledge about the etiology, clinical picture, diagnosis, therapy and complications of the most common bacterial and viral neuroinfections.</p>

TEACHING UNIT 7 (SEVENTH WEEK):

DIAGNOSIS AND TREATMENT OF INTESTINAL INFECTIONS

2 school hours of lectures	2 school hours of work in a small group
<p>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.</p> <p>Seminar: Case report of a patient with an intestinal infection.</p>	<p>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.</p>

TEACHING UNIT 8 (EIGHTH WEEK):

DIAGNOSIS AND TREATMENT OF ACUTE AND CHRONIC VIRAL HEPATITIS

2 school hours of lectures	2 school hours of work in a small group
<p>Lecture: Acute and chronic viral hepatitis (hepatitis A, hepatitis B, hepatitis C viral infection; chronic hepatitis - therapeutic approach).</p> <p>Seminar: Case report of a patient with acute hepatitis.</p>	<p>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.</p>

TEACHING UNIT 9 (NINTH WEEK):

DIAGNOSIS AND TREATMENT OF ANAEROBIC INFECTIONS AND ZOONOSES

2 school hours of lectures	2 school hours of work in a small group
<p>Lecture: Anaerobic infections and zoonoses (tetanus, botulism, leptospirosis, anthrax, borreliosis, rabies, trichinosis, therapeutic approach).</p> <p>Seminar: Case report of a patient with leptospirosis.</p>	<p>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.</p>

TEACHING UNIT 10 (TENTH WEEK):

DIAGNOSIS AND TREATMENT OF HERPES VIRAL INFECTIONS

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

TEACHING UNIT 11 (ELEVENTH WEEK):

DIAGNOSIS AND TREATMENT OF FUO AND AIDS

2 school hours of lectures	2 school hours of work in a small group
<p>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.</p>	<p>What a student should know: To acquire knowledge about etiology, epidemiology, clinical picture, diagnosis, therapy, complications and prevention of HIV infection.</p>

TEACHING UNIT 12 (TWELFTH WEEK):

DIAGNOSIS AND TREATMENT OF SEPSIS AND VIRAL HEMORRHAGIC FEVERS

2 school hours of lectures	2 school hours of work in a small group
<p>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.</p>	<p>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</p>

TEACHING UNIT 13 (THIRTEENTH WEEK):

DIAGNOSIS AND TREATMENT OF PARASITIC AND RICKETTSIAL DISEASES

2 school hours of lectures	2 school hours of work in a small group
<p>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.</p>	<p>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.</p>

TEACHING UNIT 14 (FOURTEENTH WEEK):

DIAGNOSIS AND TREATMENT OF INTRAUTERINE AND INTRAHOSPITAL INFECTIONS

2 school hours of lectures	2 school hours of work in a small group
<p>Lecture: Intrauterine infections. Congenital rubella, primary infections of pregnant women caused by CMV, HSV, Toxoplasma gondii, etc. Intra-hospital infections - Significance, definition, classification. Measures to prevent and control intra-hospital infections. Seminar: Case reports of patients with intra-hospital infection.</p>	<p>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</p>

TEACHING UNIT 15 (FIFTEENTH WEEK):

CLINICALLY IMPORTANT ADVERSE DRUG REACTIONS AND DRUG-DRUG INTERACTIONS IN INFECTIOUS DISEASES

2 school hours of lectures

Lecture: Clinically important adverse drug reactions and drug-drug interactions in treatment of infective diseases.

Seminar: Case reports of patients with adverse drug reactions and drug-drug interactions.

2 school hours of work in a small group

What a student should know: The most common adverse drug reactions and drug-drug interactions in treatment of infective diseases.

LESSON SCHEDULE FOR THE COURSE: TREATMENT OF INFECTIVE DISEASES

Module	Week	Type	Method unit name	Teacher
1	1	L	Infectious diseases as a discipline	
1	1	SG		
1	2	L	Basics of clinical careful history, epidemiologic feature, physical examination, laboratory, microbiological, serological analysis and appropriate radiographic procedure	
1	2	SG		
1	3	L	Diagnosis and treatment of streptococcal and staphylococcal infections	
1	3	SG		
1	4	L	Diagnosis and treatment of rush fever	
1	4	SG		
1	5	L	Diagnosis and treatment of respiratory infections and enterovirus	
1	5	SG		
1	6	L	Diagnosis and treatment of bacterial and viral neuroinfections	
1	6	SG		
1	7	L	Diagnosis and treatment of intestinal infections	

LESSON SCHEDULE FOR THE COURSE: TREATMENT OF INFECTIVE DISEASES

Module	Week	Type	Method unit name	Teacher
1	7	SG		
1	8	L	Diagnosis and treatment of acute and chronic viral hepatitis	
1	8	SG		
1	9	L	Diagnosis and treatment of anaerobic infections and zoonoses	
1	9	SG		
1	10	L	Diagnosis and treatment of herpes viral infections	
1	10	SG		
1	11	L	Diagnosis and treatment of FUO and AIDS	
1	11	SG		
1	12	L	Diagnosis and treatment of sepsis and viral hemorrhagic fevers	
1	12	SG		
1	13	L	Diagnosis and treatment of parasitic and rickettsial diseases	
1	13	SG		

LESSON SCHEDULE FOR THE COURSE: TREATMENT OF INFECTIVE DISEASES

Module	Week	Type	Method unit name	Teacher
1	14	L	Diagnosis and treatment of intrauterine and intrahospital infections	
1	14	SG		
1	15	L	Clinically important adverse drug reactions and drug-drug interactions in infectious diseases	
1	15	SG		
		MT	MODULE TEST	
		OE	ORAL EXAMINATION (June exam period)	

List of abbreviations: **L** - Lecture
SG – Work in a small group
MT – Module test
OE – Oral examination