DISCIPLINE SHEET

1. Study programme

1.1.	"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST
1.2.	FACULTY OF DENTISTRY
1.3.	DEPARTMENT III
1.4.	DISCIPLINE Infectious Diseases and Epidemiology
1.5.	STUDY DOMAIN: Health, sectoral regulated within the European Union
1.6.	STUDY LEVEL: I (Bachelor's degree) and II (Master's degree)
1.7.	STUDY PROGRAMME: DENTAL MEDICINE IN ENGLISH

2. Discipline

2.1.	Discipline name according to the study curriculum: INFECTIOUS DISEASES. EPIDEMIOLOGY				
2.2.	Discipline code: MD04S13EN				
2.3.	Discipline type (FD/SD/CD): SD				
2.4.	Discipline optionality (COD/ED/FAD): COD				
2.5.	Lectures tenure: Prof. Univ. Dr. Gheorghiță Jugulete; Prof. Univ. Dr. Daniela Pițigoi				
2.6.	Practical classes / seminar tenure: S.L. Mădălina Maria Merișescu, S.L. Ana Maria Tudor; As. Univ. Dr. Angelica Vișan, As. Univ. Dr. Luminița Băjenaru; As. Univ. Dr. Carmen Pavelescu, Conf. Dr. Maria Dorina Crăciun, Șef lucrări Dr. Andreea Marilena Păuna, Șef lucrări Dr. Carmen Daniela Chivu, As. Univ. Drd. Carmen Cristina Vasile, As. Univ. Dr. Matei Adrian				
2.7. Year of study	IV	2.8. Semester	I/II	2.9. Evaluation (E/C/V)	E

3. Estimated total time (hours/ semester of teaching and training activity /individual study)

I. University training						
3.1. Number of hours per week	4	from which:	3.2. lecture	2	3.3. practical class/ seminar	2
3.4. Total hours in the study curriculum	56	from which:	3.5. lecture	28	3.6. practical class/ seminar	28
II. Preparation/ individual study						
Time distribution						hours
Study of lecture materials, textbooks, books, study of the minimum recommended bibliography						24
Additional documentation activity in the library, on online platforms						16
Specific preparation activities for projects, practical classes, preparation of assignments, reports						8
Preparation for presentations or evaluations, preparation for the final examination						16
Tutoring activity						-
Other activities						-
3.7. Total hours of individual study						64

3.8. Total hours per semester (3.4.+3.7.)	**120**
3.9. Number of credits	

4. Prerequisites (where appropriate)

4.1. curriculum	▪ Students of the Faculty of Dentistry, future dental practitioners, must acquire at least basic knowledge about infectious diseases during their university training, as this category of conditions represents an important cause of morbidity and mortality in Romania.
4.2. proficiencies	▪ The Infectious Diseases course for students of the Faculty of Dentistry aims to provide fourth-year students with up-to-date knowledge in the field of infections, presented in a logical, concise, and accessible manner. ▪ The teaching staff delivering the course emphasize the essential theoretical concepts necessary to understand the infectious process, principles of diagnosis, clinical reasoning and treatment, as well as the assessment of infection risk in medical practice. ▪ In dental practice, infection prevention is essential for both bacterial and viral infections (such as HIV, hepatitis B, C, and D); post-exposure prophylaxis for accidental exposure to HIV and/or hepatitis viruses is an important chapter of the course that dentists must be familiar with. ▪ Dentists sometimes perform surgical procedures in their practice that require antibiotic prophylaxis, and many dental conditions are accompanied by bacterial infections, thus necessitating associated antibiotic therapy. ▪ Pathology of the oral cavity, particularly odontogenic infections, represents a key part of the course and is highly relevant for specialized dental practice, both for establishing a definitive diagnosis and for differentiating it from other odontogenic conditions.

5. Conditions (where appropriate)

5.1. for lecture activity	Lecture hall of the National Institute of Infectious Diseases 'Prof. Dr. Matei Balș' – 120 seats, computer, video projector.
5.2. for practical class/ seminar activity	Bedside visits together with the university instructor in the Infectious Diseases Departments of the National Institute of Infectious Diseases 'Prof. Dr. Matei Balș'

6. Learning outcomes*

Knowledge	Skills	Responsibility and autonomy
The student/graduate identifies, describes, and evaluates etiopathogenic mechanisms, clinical and paraclinical manifestations, as well as the principles of diagnosis and treatment specific to medical conditions, with particular relevance to dentistry/dental medicine.	The student/graduate recognizes and distinguishes between the general state of health and/or disease in patients who are to receive dental treatments. They demonstrate, adapt, and integrate the theoretical knowledge and practical skills necessary for assessing the state of illness, using specific clinical	The student/graduate correctly assesses and determines the patients' ability to undergo dental treatments in relation to their general state of health. They plan, implement, and coordinate integrated medical interventions under appropriate supervision, taking responsibility and collaborating in an interdisciplinary manner

	and paraclinical methods and techniques.	

7. Discipline objectives (correlated with learning outcomes)

7.1. General objective	▪ Acquisition of general knowledge related to infectious diseases (epidemiological, etiological, pathophysiological, clinical data, diagnosis, treatment, evolution, and prognosis). ▪ Acquisition of useful knowledge and practical skills related to the epidemiology of communicable diseases, aimed at developing a preventive approach in dental medical practice.
7.2. Specific objectives	▪ Knowledge of the main infectious diseases ▪ Techniques for antibiotic administration ▪ Odontogenic infections – approaches and treatment methods ▪ Prevention of infectious diseases in dental offices ▪ Post-exposure prophylaxis following accidental contact with blood or blood products ▪ Mastery of basic concepts related to: o Epidemiology of communicable diseases o Active and passive immunoprophylaxis o Legislative regulations governing dental practice in Romania ▪ Understanding of theoretical and practical aspects related to the surveillance, prevention, and control of healthcare-associated infections, including: o Hand hygiene: correct technique o Protective equipment o Standard precautions o Accidental exposure to biological materials o Cleaning, disinfection, and sterilization o Waste management from medical activities

8. Contents

8.1. Lecture	**Teaching methods**	**Observations**
1. INTRODUCTORY COURSE: • Classification of the main etiological agents of infectious diseases: viruses, bacteria, chlamydia, mycoplasmas, rickettsia, pathogenic fungi, protozoa, metazoan. • General principles of diagnosis based on epidemiological, clinical, and laboratory criteria. • General principles of treatment in infectious diseases: hygienic treatment, dietary measures, specific etiological treatment with biological products, pathogenic treatment, symptomatic treatment, and measures to enhance general resistance. • Prevention of infectious diseases, including post-exposure prophylaxis.	Interactive presentation of the material according to the syllabus, using multimedia tools, PowerPoint presentations, and educational videos	The course can also be delivered online if needed
2. ANTIBACTERIAL TREATMENT IN INFECTIOUS DISEASES • Classification of antibiotics and chemotherapeutic agents. • Antibiotics (I): β-lactams, penicillins, cephalosporins, thienamycins, β-lactamase inhibitors, monocyclic β-		

lactams, aminoglycosides, macrolides, polymyxins, lincosamides, rifamycins, chloramphenicol, tetracyclines, nitrofurans, sulfonamides, quinolones, nitroimidazoles, antifungals, antivirals. • Administration techniques, antibacterial, antifungal, or antiviral spectrum, clinical indications, dosages for children and adults, dosing intervals, treatment duration, and adverse reactions.		
3. ACUTE VIRAL AND BACTERIAL TONSILLITIS. DIPHTHERIA. STOMATITIS. INFECTIOUS MONONUCLEOSIS • Clinical and etiological classification of tonsillitis and stomatitis. • Etiopathogenesis, epidemiology, clinical presentation, complications, definitive and differential diagnosis, treatment, and prevention.		
4. MAJOR ERUPTIVE DISEASES: SCARLET FEVER, MEASLES, RUBELLA, CHICKENPOX • Etiopathogenesis, epidemiology, clinical presentation, complications, definitive and differential diagnosis, treatment, and prevention.		
5. RESPIRATORY TRACT INFECTIONS: COVID-19, INFLUENZA, ADENOVIRAL INFECTIONS, RESPIRATORY SYNCYTIAL VIRUS INFECTION (BRONCHIOLITIS), WHOOPING COUGH, MUMPS • Etiopathogenesis, epidemiology, clinical presentation, complications, definitive and differential diagnosis, treatment, and prevention.		
6. ACUTE BACTERIAL AND VIRAL GASTROENTEROCOLITIS, FOODBORNE TOXIN INFECTIONS, BOTULISM • Etiopathogenesis, epidemiology, clinical presentation, complications, definitive and differential diagnosis, treatment, and prevention.		
7. ACUTE VIRAL HEPATITIS: CURRENT ETIOLOGICAL AND CLINICAL SPECTRUM • Etiopathogenesis, epidemiology, clinical presentation, complications, definitive and differential diagnosis, treatment, and prevention.		
8. ENTEROVIRAL INFECTIONS: POLIOMYELITIS, ACUTE INFECTION WITH ECHO AND COXSACKIE VIRUSES **TETANUS** • Etiopathogenesis, epidemiology, clinical presentation, complications, definitive and differential diagnosis, treatment, and prevention.		
9. ACUTE CENTRAL NERVOUS SYSTEM INFECTIONS: ACUTE MENINGITIS AND ENCEPHALITIS, RABIES		

• Etiopathogenesis, epidemiology, clinical presentation, complications, definitive and differential diagnosis, treatment, and prevention.		
10. HIV INFECTION/AIDS. INFECTIONS WITH OPPORTUNISTIC PATHOGENS ASSOCIATED WITH HIV/AIDS • Etiopathogenesis, epidemiology, clinical presentation, complications, definitive and differential diagnosis, treatment, and prevention.		
11. ODONTOGENIC INFECTIONS: ODONTITIS, PERIODONTITIS, INFECTIONS OF THE MAXILLOFACIAL SOFT TISSUES • Current etiological spectrum and antibacterial treatment.		
12. General Epidemiology — definition, history, methods, fields of application, prevention		
13. Epidemiology of Infectious Diseases — infectious process, epidemiological process		
14. Epidemiology of Infectious Diseases — forms of manifestation of the epidemiological process. Surveillance, prevention, and control of healthcare-associated infections and antibiotic stewardship		
8.2. Practical classes/ seminar	**Teaching methods**	**Observations**
LP1: Eruptive infectious diseases: measles, rubella, chickenpox, herpes zoster, scarlet fever, streptococcal and staphylococcal infections — clinical examination, discussion of laboratory test results, definitive diagnosis, treatment, and prevention.	Students, under the guidance of teaching staff, conduct bedside visits.	
LP2: Tonsillitis, pharyngitis, stomatitis, influenza, COVID-19, adenoviral infections, and infectious mononucleosis — clinical examination, discussion of laboratory test results, definitive diagnosis, treatment, and prevention.		
LP3: Odontogenic infections: gingivitis, suppurative infections; complications — clinical examination, discussion of laboratory test results, definitive diagnosis, treatment, and prevention. Epidemic parotitis, moderate and severe forms (with pancreatic reaction, Urals meningitis, presternal edema, orchitis). Chronic hypertrophic parotitis in children infected with HIV/AIDS. Suppurative bacterial parotitis — clinical examination, discussion of laboratory test results, definitive diagnosis, treatment, and prevention.		
LP4: Bacterial and viral digestive infections. Foodborne toxin infections. Botulism — clinical examination, discussion of laboratory test results, definitive diagnosis, treatment, and prevention.		
LP5: Acute viral hepatitis: A, B, C, D, E. Occupational transmission risk and mandatory hepatitis vaccination — clinical examination, discussion of laboratory test results, definitive diagnosis, treatment, and prevention.		

LP6: Nervous system infections: viral and bacterial meningitis, acute encephalitis — clinical examination, discussion of laboratory test results, definitive diagnosis, treatment, and prevention. Rabies and tetanus prophylaxis.		
LP7: HIV infection and AIDS. Occupational exposure risk and mandatory compliance with preventive norms. Opportunistic infections — clinical examination, discussion of laboratory test results, definitive diagnosis, treatment, and prevention.		
LP8: Active and passive immunoprophylaxis.	Interactive presentation of the material according to the syllabus, using multimedia tools, PowerPoint presentations, and educational videos. Exercises. Hand Hygiene technique assessment.	
LP9: Standard precautions. Blood exposure accident (BEA). Hand hygiene.		
LP10: Decontamination. Disinfection. Sterilization.		
LP11: Legislative aspects encountered in dental practice.		

Recent bibliography:

1. Infectious Diseases - Course for Dentistry Faculty Students, edited by Prof. Dr. Gheorghiță Jugulete, BREN Publishing, 2025
2. Treatise on Infectious Diseases, Volumes 1, 2, 3, edited by Emanoil Ceaușu, Medical Publishing House, 2020
3. Compendium of Pediatric Infectious Diseases, Volume I, Monica Luminos, BREN Publishing, 2016
4. Compendium of Pediatric Infectious Diseases, Volume II, Gheorghiță Jugulete, BREN Publishing, 2016
5. HIV/AIDS Infection in Children – Clinical, Immunological, and Virological Aspects of Antiretroviral Therapy, BREN Publishing, 2016
6. Mandell, Bennett, & Dolin: Principles and Practice of Infectious Diseases, 9th edition, Copyright 2019, Churchill Livingstone, An Imprint of Elsevier.
7. Denis L. Kasper, Anthony S. Fauci: Harrison's Infectious Diseases, 2020
8. Pițigoi D, et al, editors Epidemiologie. Curs și lucrări practice pentru studenți și medici rezidenți. Ed. Revizuită și adăugită. Ed. Univ. Carol Davila, București, 2022
9. CNSCBT, Metodologii de supraveghere a bolilor transmisibile în România http://www.cnscbt.ro/index.php/metodologii, 2025
10. Heymann DL., Manual of Communicable Disease Control, 19th Edition, Amaltea Medical Publishing, Bucharest, 2012

Legislative Framework Regulating Dental Practice (Optional)

11. Ministry of Health, Order No. 1101/2016 approving the Norms for Surveillance, Prevention, and Limitation of Healthcare-Associated Infections in Healthcare Units
12. Ministry of Health, Order No. 961/2016 for the approval of Technical Norms regarding cleaning, disinfection, and sterilization in public and private healthcare units, working techniques and interpretation for tests evaluating the effectiveness of cleaning and disinfection procedures, recommended procedures for hand disinfection depending on the risk level, methods of applying chemical disinfectants depending on the surface to be treated, and methods for assessing the implementation and effectiveness of the sterilization process.

13. Ministry of Health, Order No. 1226/2012 for the approval of Technical Norms regarding the management of waste resulting from medical activities and the Methodology for data collection for the national database on medical waste.

Periodicals and Other Web Resources (Optional)

14. MMWR Journal (CDC)
15. Eurosurveillance Journal (ECDC) — www.eurosurveillance.org
16. Centers for Disease Control and Prevention, USA, Atlanta (CDC) — www.cdc.gov
17. European Centre for Disease Prevention and Control, Stockholm, Sweden (ECDC) — www.ecdc.europa.eu
18. World Health Organization, Geneva (Copenhagen – Europe Office) (WHO) — www.who.int
19. National Institute of Public Health, Bucharest — www.insp.gov.ro

9. Assessment

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage of final grade
9.4. Lecture	▪ **Requirements for a passing grade (5**): 20 solved multiple-choice questions ▪ **Requirements for a top grade (10):** 45 solved multiple-choice questions	▪ **Exam** – multiple-choice test with 50 single-answer questions, duration one hour.	90 %
9.5. Practical classes/ seminar	▪ The evaluation is conducted throughout the entire duration of the internship.	▪ In each internship session, the group instructor will evaluate the student's attitude throughout the internship period (attendance, punctuality, dress code, involvement, theoretical preparation in accordance with the work phase, attitude towards patients and auxiliary staff).	10 %
9.5.1. Individual project (if any)	-	-	-
Minimum performance standard			
▪ Basic knowledge of the most important infectious diseases, techniques for administering antibiotics, as well as infectious disease prophylaxis. ▪ Knowledge of the basic concepts of Epidemiology.			