Sveučilište u Rijeci • Fakultet dentalne medicine
University of Rijeka • Faculty of Dental Medicine

Course: Infectology
Course Coordinator: Assist. Prof. Irena Slavuljica, MD, PhD
Department: of Infectious Diseases
Study program: Integrated Undergraduate and Graduate University Study of Dental Medicine
Study year: 3rd
Academic year: 2022 / 2023.

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.):

The course deals with general infectology: characteristics of infectious diseases (etiology, epidemiological features, pathomorphological and pathophysiological changes, clinical features, oral flora, physiology and immunology of the oral cavity), diagnosis and treatment of infectious diseases. The special infectology part includes infectious diseases by organ systems: infections of the oral cavity (bacterial, viral, fungal), systemic infections, odontogenic infections, complications of odontogenic infections, non-odontogenic infections of the oral cavity and their complications, infections of deep fascial spaces, cervical lymphadenopathy and other head and neck infections, anaerobic infections, viral hepatitis, HIV infection, diagnosis, prevention and treatment of oral infections.
Seminars: include recognition and definition of individual symptoms and disease syndromes that are particularly important in dental medicine, analysis of clinical and diagnostic findings, summarization and synthesis of problems, planning of diagnostic, therapeutic, chemoprophylactic and immunoprophylactic procedures.
The aim and planned outcome of the course is to train students to diagnose and treat infections of the oral cavity, head and neck. Students will also be trained to recognize infectious disease emergencies and start antimicrobial treatment.
A special task is to educate students on the rational use of antimicrobial drugs in the treatment of oral infections and antimicrobial chemoprophylaxis during high-risk dental procedures.
Classes will be held in the lecture room of the Department of Infectious Diseases, which is located on the ground floor of the Clinic for Infectious Diseases at the CHC Rijeka.

Assigned reading:

Mandell et al. Principles and Practice of Infectious Diseases, Churchill, Livingstone, 2019.(chapter: Infections of the oral cavity, Hepatitis B, Hepatitis C, HIV infection).

Optional/additional reading:

Huppe J.M. and Ferneini E.M., Elsevier, 2016. Head, neck, and orofaciall infections, an interdisciplinary approach

COURSE TEACHING PLAN:

The list of lectures (with topics and descriptions):

L1. General infectology.

Learning outcomes: To list and explain the basic terms necessary for understanding of infectious diseases. To relate preclinically acquired knowledge in physiology, microbiology, pathophysiology and pathology with symptoms and signs of infectious diseases. To recognize the conditions for the emergence of an infectious disease.

L2. Microbial flora of the oral cavity. Physiology and immunology of the oral cavity. Infections of the oral cavity.
Learning outcomes: To recognize the physiological flora of the oral cavity and the microflora of odontogenic inflammation. To identify the latest immunopathogenetic features of infectious diseases based on preclinically acquired knowledge in pathophysiology and immunology. To describe the clinical characteristics of oral infections and their diagnostic and therapeutic options.

L3. Antimicrobial therapy for oral infections.
Learning outcomes: To explain the basic principles of choosing and using antimicrobial drugs in odontogenic infections. To apply the principles of initial (empirical) and targeted treatment of odontogenic infections. To demonstrate the rational application of antimicrobial therapy for odontogenic infections and their complications. To explain the pharmacokinetics and pharmacodynamics of antibiotics used in dental medicine and to recognize their side effects and the resistance of microorganisms to certain antibiotics.

L4. Odontogenic and non-odontogenic infections and their complications. Infections of deep fascial spaces.
Learning outcomes: To define the clinical symptoms of odontogenic and non-odontogenic infections and their complications. To recognize, diagnose and treat emergencies in odontogenic and non-odontogenic infections and their complications. To describe the clinical symptoms, diagnosis and treatment of infections of deep fascial spaces, especially the principles of their emergency care.

L5. Viral hepatitis. HIV infection.
Learning outcomes: To identify the clinical, epidemiological, etiological, immunopathogenetic and therapeutic characteristics of viral hepatitis and HIV/AIDS. To describe chemoprophylaxis and immunoprophylaxis of viral hepatitis and HIV.

The list of seminars with descriptions:

S1. Examination of the oral cavity, head and neck.
Learning outcomes:
To perform a detailed clinical examination of the oral cavity, head and neck region based on the acquired knowledge in propaedeutics of internal medicine.
S2. Interpretation of hematological and biochemical findings. Serological and molecular diagnostics of infectious diseases.
Learning outcomes:
To interpret hematological, biochemical and microbiological findings in the diagnostics of infectious diseases with special reference to the diagnosis of odontogenic infections and their complications.
S3 Chemoprophylaxis of bacterial endocarditis – case report.
Learning outcomes: To explain which cardiovascular diseases and conditions have a high risk for developing infective endocarditis and require chemoprophylaxis during dental procedures. To explain the etiopathogenesis of infective endocarditis. To recognize the indications for antimicrobial prophylaxis of infective endocarditis during dental procedures based on the latest procedures.

S4 Diagnosis, treatment and prevention of oral infections. Fever.
Learning outcomes: To diagnose, treat and prevent infections of the oral cavity. To explain the pathogenesis of fever and the clinical and laboratory criteria for systemic inflammatory response (SIRS) and sepsis.

S5 Procedure for percutaneous and transcutaneous stabbing incidents. Pre-exposure and post-exposure chemoprophylaxis.
Learning outcomes: To apply the procedure for initial evaluation and treatment to prevent blood-borne infections after occupational exposure. To apply the valid steps of pre-exposure and post-exposure chemoprophylaxis of HBV, HCV and HIV infections. To apply the procedure after a percutaneous incident.

Students' obligations:

Students are obligated to regularly attend all forms of teaching (lectures and seminars) according to the Study Regulations.

Assessment (exams, description of written / oral / practical exam, the scoring criteria):

Student grading is conducted according to the current Ordinance on Studies of the University of Rijeka.
Students are graded using the ECTS (A-F) and numerical system (1-5). Grading in the ECTS system is carried out by absolute distribution.
The students' work will be evaluated and evaluated during the course and in the final exam. Out of a total of 100 points, a student can get 70 points during classes, and 30 points in the final exam.
Teaching in the Infectology course takes place in the form of lectures and seminars. During the class there will be 1 midterm exam and at the end of the class a final exam in the form of a written test. Out of the maximum 70 grade points that can be obtained during classes, the student must collect at least 35 grade points in order to take the final exam.
A student can miss a maximum of 30% of each form of teaching solely for health reasons, which is justified by a medical certificate (excuse letter). Compensation for exercises is not possible. If a student, justified or unjustified, misses more than 30% of classes, he cannot continue following the course and loses the opportunity to take the final exam. He thus collected 0 ECTS points.

EVALUATION OF STUDENT ACTIVITIES AND METHOD OF ACQUIRING GRADE POINTS
The student is obliged to prepare material for individual exercises in order to actively discuss the given topic with the teacher and other students.

Other important information regarding to the course:

All changes in the course syllabus and important information regarding the course will be published on the web pages and the notice board of the Department of Infectious Diseases placed in the atrium of the Clinic for Infectious Diseases, Clinical Hospital Center Rijeka. Students personally arrange time and date for consultations with lecturers via e-mail or onsite. Department secretary Sanja Rivetti is available from Monday to Friday from 8 am to 12 pm (phone: +385 51 658 271; e-mail: infektologija@kbc-rijeka.hr).

Retaking the course:

In case of re-enrolling the course the students have the same responsibilities as the first time attendees and are obliged to regularly attend, actively participate and complete assignments in all forms of teaching.

COURSE SCHEDULE (for academic year 2022/23)

30.1.-3.2. Cariesology

Date	Lectures (time and place	Seminars (time and place)	Practicals (time and place)	Teacher
11.11. 2022.	P1 (08,15-10,30)			Assist. Prof. Irena Slavuljica, MD, PhD
01.10. 2021.		S1(11,00-13,15)		Assist. Prof. Irena Slavuljica, MD, PhD
06.10. 2021.	P2(08,15-10,30)			Prof.Ivica Pavić, MD, PhD.
06.10. 2021.		S2(11,00-13,15)		Assist. Prof. Irena Slavuljica, MD, PhD
07.10. 2021.	P3 (08,15-10,30)			Assist. Prof Đurđica Cekinović Grbeša, MD, PhD.
07.10. 2021.		S3(11,00-13,15)		Assist. Prof. Irena Slavuljica, MD, PhD
13.10. 2021.	P4 (08,15-10,30)			Assist. Prof. Irena Slavuljica, MD, PhD
13.10. 2021.		S4 (11,00-13,15)		Assist. Prof Đurđica Cekinović Grbeša, MD, PhD.
14.10. 2021.	P5 (08,15-10,30)			Prof.Ivica Pavić, MD, PhD.

14.10. 2021.		S5 (11,00-13,15)		Assist. Prof. Irena Slavuljica, MD, PhD Assist. Prof. Irena Slavuljica, MD, PhD

List of lectures, seminars and practicals:

	LECTURES (Topics)	Teaching hours	Location/Lecture room
L1	General infectology	3	Kresimirova 42
L2	Microbial flora of the oral cavity. Physiology and immunology of the oral cavity. Infections of the oral cavity	3	Kresimirova 42
L3	Antimicrobial therapy for oral infections	3	Kresimirova 42
L4	Odontogenic and non-odontogenic infections and their complications. Infections of deep fascial spaces.	3	Kresimirova 42
L5	Viral hepatitis. HIV infection	3	Kresimirova 42
	TOTAL TEACHING HOURS	15	

	SEMINARS (Topics)	Teaching hours	Location/Lecture room
S1	Examination of the oral cavity, head and neck.	1	Kresimirova 42
S2	Interpretation of hematological and biochemical findings. Serological and molecular diagnostics of infectious diseases	1	Kresimirova 42
S3	Chemoprophylaxis of bacterial endocarditis – case report.	1	Kresimirova 42
S4	Diagnosis, treatment and prevention of oral infections. Fever.	1	Kresimirova 42
S5	Procedure for percutaneous and transcutaneous stabbing incidents. Pre-exposure and post-exposure chemoprophylaxis	1	Kresimirova 42
	TOTAL TEACHING HOURS	15	

	FINAL EXAM DATES
1.	17.10.2022.
2.	20.02.2023.
3.	2.06.2023.