

Study program: Integrated academic studies in dentistry				
Type and level of the study program: integrated academic studies				
Course title: Clinical immunology (DIII-IMNL)				
Teacher: Ilić A. Tatjana, Mitić M. Igor, Čelić M. Dejan				
Course status: elective				
ECTS Credits: 3				
Condition: Pathological anatomy; Pathophysiology; Pharmacology				
Course aim The main goal of education in clinical immunology is to get students acquainted with the principles of outbreak of immune disease, diagnostic methods and principles and theoretical and practical aspects of the treatment of immunological diseases. The practical result of teaching is to enable the students to master the skills of practical work in practice, and to develop the critical and fact-conditioned thinking, and enable students to participate in scientific - research work in the field of immunology.				
Expected outcome of the course: Introducing students to the mechanisms and disorders of the function of immune system, as well as primary and environment-related genetic factors that may play a role in the development of immune diseases. The student will get acquainted with diagnostic methods in this group of diseases, the basic therapeutic methods in the treatment of immune diseases, as well as with the complications of the immunomodulatory and immunosuppressive therapy. Application approved practical knowledge in medicine: establishing suspect diagnosis of immunological disease, methods for confirmation of suspect immunologically induced disease. Basics of clinical and laboratory methods for confirmation of immune diseases. Learning of the basic methods of treatment. Application of analytical and synthetic way of thinking as a basis for proper classification of immune diseases: probability of occurrence – clinical manifestations – confirmation of suspect disease – therapy – treatment of potential complications				
Course description <i>Theoretical education</i> 1. Introduction to clinical immunology. Immunological diagnosis. 2. Autoimmunity. Systemic lupus erythematosus 3. Vasculitis. Rheumatoid arthritis 4. Rheumatology in childhood 5. Glomerulonephritis 6. Immunodeficiency. Immune therapy. 7. Endocrine diseases associated with immune processes 8. Hematologic diseases associated with immune processes 9. Principles of personalized and transplantation medicine in demyelinated diseases in neurology 10. Allergic dermatoses 11. Transplantation medicine in practice 12. Asthma – immunologic and clinical aspects 13. Immunologic manifestations during nonspecific pulmonary infections 14. Immunologic characteristics of granulomatous diseases 15. Allergic diseases in the ORL region <i>Practical education: exercises, other forms of education, research related activities</i> Practices are held as 2 one-week block of classes in the summer semester. The first week at the Clinic for Nephrology and Clinical Immunology KC Vojvodina, the second week, divided to the KCV Clinic for Dermatology, Clinic for ENT and the Institute for Pulmonary Diseases of Vojvodina 1. Immunological laboratory: protein electrophoresis, radial immune diffusion, agglutination technique for detection of rheumatoid factor and C reactive protein 2. Immunological laboratory: indirect immunofluorescence (heterogeneous biological substrates, tissue culture, cell smear), immunofluorescence method for detection of immune complexes deposits in tissues, ELISA. 3. Clinical examination of patients with immunological and rheumatoid diseases. 4. Clinical examination and treatment of patients with organ transplants. 5. Hypersensitivity skin test status, clinical examination of patients with skin manifestation of immune diseases, diagnosis and treatment. 6. Functional lung tests in respiratory atopic disease, clinical examination and treatment of immunologically induced lung disease. 7. Diagnosis and treatment of systemic atopic reaction (seminar)				
Literature <i>Compulsory</i> 1. Zabriskie JB. Essential Clinical Immunology. Rockefeller University, New York, 2009 2. Burmester GR, Pezzutto A. Color Atlas of Immunology. Thieme 2003				
Number of active classes				Other:
Lectures: 30	Practice: 15	Other types of teaching:	Research related activities:	
Teaching methods: Lectures, practical work with patients in different hospitals, examination, diagnosis of immunological disorders,				

immune therapy caused illness, work in the laboratory of Immunology, alergology laboratory work, writing reports on immunological findings.

Student activity assessment (maximally 100 points)

Pre-exam activities	points	Final exam	points
Lectures	25	Written	
Practices	25	Oral	40
Colloquium		
Essay	10		